

Here's a new product that's

keeping me competitive!

Keep a competitive edge with Hunter's new SRS spray sprinkler. There's a wide range of pop-ups (2" to 12") and standard side inlets on 6" and 12" models for faster installation. But the best news may be the SRS's adaptability. It accepts all standard female-threaded nozzles... just like the ones on your truck.

The SRS Spray.
Hunter quality,
competitively priced.



**Introducing
the SRS
Spray Sprinkler**

Simple
NEW
Reliable
SERIES

See Hunter's new Simple & Reliable Series at your local distributor or call 800-733-2823.

USE READER SERVICE #10

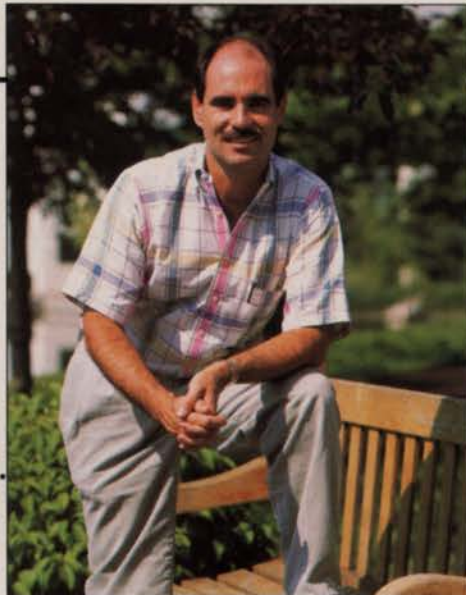
Hunter®
The Irrigation Innovators

Lawn & Landscape

More Than 62,000 Subscribers Monthly

Charlie Ralph
Lake Oswego, Ore.

Cover Photo



CONTENTS

Departments



p. 56

LAWN & LANDSCAPE (USPS 657-470 ISSN 1046-154X) is published 12 times per year. Copyright 1996 G.I.E., Inc. Publishers, 4012 Bridge Ave., Cleveland, Ohio 44113. All rights reserved. No part of this publication may be reproduced or transmitted by any means without written permission from the publisher. One year subscription rates, \$30 in the United States, \$35 in Canada and \$98 in other foreign countries. One year foreign airmail rate: \$218. Two year subscription rate: \$42. Subscriptions and classified advertising should be addressed to the Cleveland office. Periodicals postage paid at Cleveland, Ohio, and additional mailing offices. Postmaster send address changes to LAWN & LANDSCAPE, 4012 Bridge Ave., Cleveland, Ohio 44113.

70
Advertisers' Index

9
Association News

59
Buyers' Market

6
Calendar

67
Classifieds

56
Equipment Notebook

10
In Business

13
Landscape Notebook

6
Market Trends

10
People

60
Products

4
Publisher's Focus

Cover Story

16 All for One

Service, quality and innovation have kept Teufel Nursery at the top of the green industry in the Pacific Northwest for more than a century.



Features

24 Good News, Bad News

Ideal spring and summer weather brought most turf seed farmers a healthy crop in the Pacific Northwest. Still, demand will likely surpass available supply for many varieties.

30 Compost Applications Get Specific



Agronomic, as well as economic benefits are causing more contractors to use compost for turf, top-

dressing and other landscape applications.

38 Software Part 2:
Accounting for Everything

What began as a tool for developing financial statements has grown into much more as contractors take control of their accounting procedures.

46 Soil Basics Part 2:
Rescuing Damaged Soils

Accidents do happen and roadside salt, spilled oil or product misapplications can change a healthy soil into an unhealthy mix. Quick action is often necessary.

52 What's All the Noise About?

Blower and vacuum makers have put most design issues on the back burner and focused their attention on noise emission. Because contractors rely on them so much, it's doubtful they'll disappear from the market.



•
•
•
Cindy Code
Group
Publisher

The lawn and landscape industry is fickle. Successful owners, managers and technicians, alike, are quick to realize this. They have to be, day in and day out, as they conduct the business at hand.

Contractors are also cognizant of the fact that they need assistance from their local dealer to make things happen. In an industry as reliant on performance and productivity as the landscape industry, things need to happen quickly. But do dealers feel the same way? Like any other business, the answer is yes, and no.

As the professional lawn and landscape market has matured so, out of necessity, has the distribution of power equipment. But as users of power equipment continue to put pressure on dealers to deliver priority service and deliver replacement parts on the spot, the dealer network has sagged, even faltered, under the strain.

Dealers, like contractors, know their customers and know the needs of their customers come first. The commitment, however, is hardly universal. As is often the case, dealers find the consumer market easier to service than the professional market.

The tide may be beginning to change, however.

At the recent Outdoor Power Equipment Show in Louisville, dealers, distributors, manufacturers and contractors gathered together for the industry's largest look at power equipment. Mowers, commercial mowers, in particular, were plentiful. At one count, more than 30 variations of commercial mowers were present.

With both dealers and landscapers in attendance at the show, we decided to survey attendees for their opinions on the power equipment distribution network. Dealers responding to our survey indicated they sell both consumer and commercial equipment, but those same respondees said revenues from product sales were nearly double in the consumer market. The surveys also showed that few offered 24-hour parts service to commercial customers....a sure pitfall if you're trying to gain the allegiance of a contractor.

Contractors, on the other hand, told us they still frequent the dealer, for the most part, for product purchases and that service is the number one consideration when selecting a dealer.

While many dealers are still following old patterns and ideals when it comes to equipment sales, they're missing a prime opportunity to delve into an established market that is annually willing to put resources into new equipment.

The lion's share of the 1996 landscape season may be behind us, but don't look now, 1997 is right around the corner and there's a great opportunity for contractors and dealers alike to become partners in growing their individual, yet mutual, businesses. Service is essential to residential and commercial customers as well as property managers across the country. Service should be the link between contractors and dealers. — *Cindy Code*



Lawn & Landscape

EDITORIAL

Cindy Code Group Publisher
e-mail: 104656.702@compuserve.com

Susan Gibson Editor
e-mail: 102770.56@compuserve.com

Paul Schrimpf Managing Editor
e-mail: 104724.1204@compuserve.com

Bob West Assistant Editor

GRAPHICS/PRODUCTION

Mark Rook Creative Director
Charlotte Turcotte Art Director
Tracy Green Graphic Designer
Helen Duerr Production Coordinator
Lori Zachmann Advertising Production Coordinator

Rosalie Slusher Circulation Manager
Fran Franzak Books Manager

ADVERTISING/MARKETING

Maureen Mertz Publisher/East Coast Sales
1723 South Hill
Milford, Michigan 48381
810/685-2065
Fax: 810/685-2136

Kendra Greenwald Account Manager
Kevin Gilbride Account Representative

CORPORATE STAFF

Richard J. W. Foster President and CEO
Christopher W. Foster Vice President/General Manager
Jim Keefe Manager, Sales and Marketing
Jami Childs Production Manager

EDITORIAL & SALES OFFICES

4012 Bridge Avenue, Cleveland, Ohio 44113
Phone: 216/961-4130
Fax: 216/961-0364

Subscriptions and Classifieds:
216/961-4130

L&L is a member of:

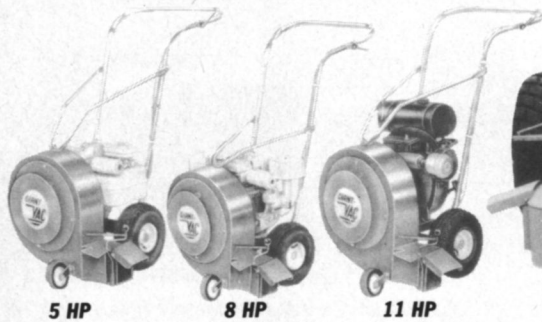
The Professional Lawn Care Association of America
The Associated Landscape Contractors of America
The Professional Grounds Management Society
The Irrigation Association
Responsible Industry for a Sound Environment
Turf & Ornamental Communicators Association
The Ohio Turfgrass Foundation
American Association of Nurserymen
National Landscape Association
The Composting Council



GIANT-VAC *Pioneer of Vacs*

WHEREVER THERE'S DEBRIS THERE'S A NEED FOR A GIANT-VAC...AND GIANT-VAC HAS A MACHINE FOR ALL NEEDS!

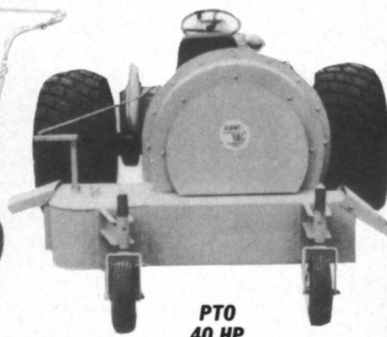
GIANT-BLO



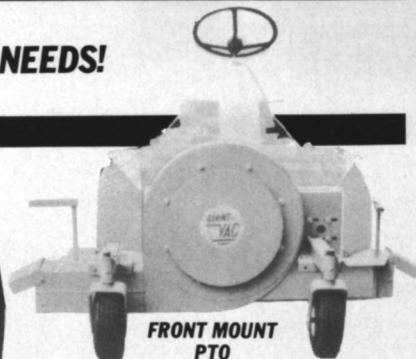
5 HP

8 HP

11 HP



PTO
40 HP



FRONT MOUNT
PTO

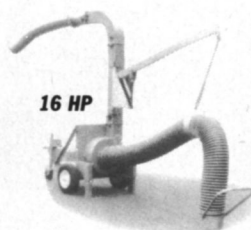
GIANT-VAC

*The Originator and Pioneer
of Debris Equipment
For Over A Quarter Century*

TRUCK LOADERS



8 & 11 H TAILGATE MODELS



16 HP

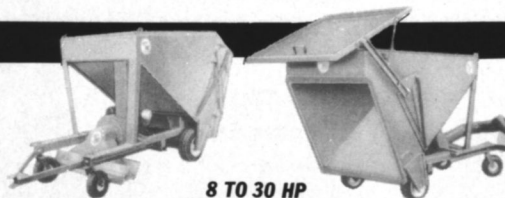


20 HP

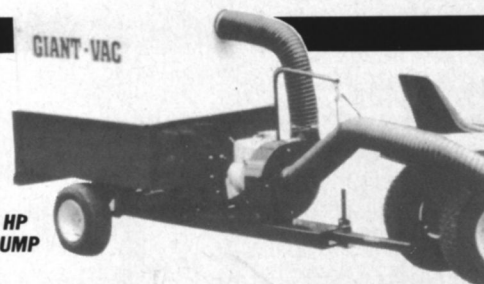


65 TO 138 HP

TRAIL VACS



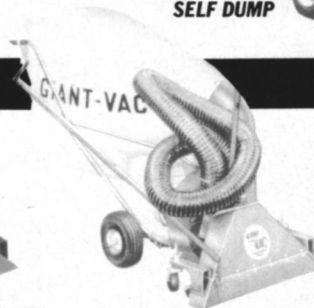
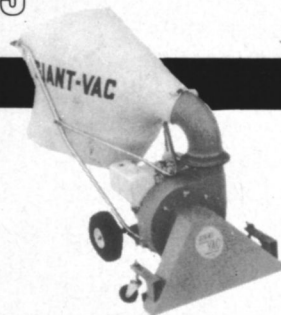
8 TO 30 HP
TOW BEHINDS



5 & 8 HP
SELF DUMP

GIANT VACS

FROM 5 TO 11 HP

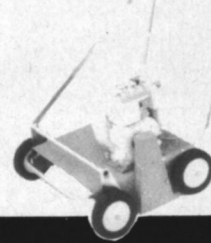


**COMMERCIAL
MOWERS**
36" to
61"



**LOG
SPLITTERS**

THATCHER
Call For
More
Details



GIANT-VAC

MFG., INC. • SOUTH WINDHAM, CONN. 06266 • (203) 423-7741

AFFILIATE OF H. L. DIEHL CO., INC.

FAX: (203) 423-2654

USE READER SERVICE #74

CONTRACTORS RATE DEALER SERVICES

Productivity is a top priority with lawn and landscape contractors who participated in a survey sponsored by *Lawn & Landscape* magazine, held at the recent Outdoor Power Equipment Expo in Louisville, Ky. When asked the most important consideration in choosing a dealer, 58.15 percent said service was their number one concern.

Survey respondents also cited price (20.93 percent), brand name (13.95 percent), proximity to contractor's location (4.6 percent) and other reasons (2.32 percent).

An overwhelming 79.68 percent of respondents said they buy mowers and hand-held power equipment at dealers, compared to distributors (10.93 percent), mass merchandisers (4.68 percent), manufacturers direct (3.12 percent) and other sources (1.56 percent).

SERVICE HITS THE MARK



Source: L&L Industry Survey

NEW FIFRA LEGISLATION CLARIFIES SOME ISSUES, MUDDIES OTHERS

The reauthorization of the Federal Insecticide, Fungicide and Rodenticide Act was signed into law last month after nearly a decade of political wrangling, but it will be some years before the full impact of this legislation on lawn and landscape contractors comes to light.

The new "Food Quality Protection Act of 1996" provides pesticide manufacturers with some relief, but also brings the future of turf and ornamental pesticide registration into question.

Industry insiders agree that the new law's most important component is the replacement of the 1958 Delaney clause, which promoted a zero tolerance of pesticides on food. The new "safe" standard redefines pesticide residue tolerance as a "reasonable certainty of no harm."

On the negative side, the law

calls for the Environmental Protection Agency to perform a risk review of pesticides,

taking into consideration every commercial, agricultural and consumer use of each pesticide to evaluate all possible exposure potential. According to Allen James, executive director of Responsible Industry for a Sound Environ-

ment, the EPA is responsible for developing formulas for measuring this total toxicology. Depending on how stringent these formulas are, it may cause some manufacturers to discontinue turf and

(continued on page 8)

CALENDAR

To ensure that your meeting date is published, send an announcement at least 10 to 12 weeks in advance to *Lawn & Landscape*, 4012 Bridge Ave., Cleveland, OH 44113.

SEP. 25 Hampton Roads Agricultural Research Center Field Day, Virginia Beach, Va. Contact: 804/363-3906.

OCT. 7 Irrigation Association Certified exams, Fairfax, Va., and Fresno, Calif. Contact: 703/573-3551.

OCT. 10-11 Northeast Shade Tree Seminar, Portsmouth, N.H. Contact: 603/436-4804.

OCT. 19-21 American Society of Landscape Architects Annual Meeting, Los Angeles. Contact: 202/686-8353.

OCT. 23-24 Pacific Hort Expo and California Association of Nurserymen Convention, Las Vegas, Nev. Contact: 800/517-0391.

OCT. 23-25 Composting in the Carolinas, Myrtle Beach, S.C. Contact: Ron Alexander, 919/460-6266.

NOV. 3-6 International Irrigation Exposition, San Antonio, Texas. Contact: 703/573-3551.

NOV. 7-8 Tree Care Industry Expo '96, Charlotte, N.C. Contact: 800/733-2622.

Nov. 12-15 Turf & Grounds Exposition, Rochester, N.Y. Contact: 800/873-TURF.

Nov. 13-15 Composting Council Annual Conference, Arlington, Va. Contact: 703/739-2401.

Nov. 17-21 Green Industry Expo, Cincinnati, Ohio. Contact 770/973-2019.

IF YOU WANT TO KNOW HOW LONG
GALLERY WORKS TO PREVENT BROADLEAF WEEDS,
ASK SOMEONE WITH TIME ON THEIR HANDS.



After applying Gallery* preemergence herbicide, you've got about 6 to 8 months of good solid waiting before you'll spot the emergence of any of over 95 different broadleaf weeds. Even the tough ones like spurge, dandelion and plantain.

In fact, Gallery is the only preemergent on the market today that's designed to prevent so many broadleaf weeds, yet is safe over the top of all turfgrasses,

and over 400 different species of ornamentals.

So now that you have a little extra time on your hands, maybe you can get around to digging up even more business.

For further information on Gallery, or any other product in the extensive line of DowElanco products, give us a call at 1-800-352-6776. Always read and follow label directions.



*Trademark of DowElanco



MARKET TRENDS

(continued from page 6)

ornamental labeling on some pesticides.

"If landscape use causes the total risk to be too high, we may see a reduction in the overall number of products available to landscape

professionals," said James.

Virtually all pesticides used in turf and ornamental applications will be subjected to this tolerance review over the next 10 years, and the law requires that the first one-third of these reviews be completed in the next three years.

Another negative was the lack of a national preemption statute, which ended up being one of the compromises that allowed the bill to pass. James said the Democratic faction within the House Commerce Committee demanded that preemption be removed.

Tom Delaney, vice president of government-

tal affairs with the Professional Lawn Care Association of America, said that while state level preemption in 41 states has done well to keep local governments from passing restrictive pesticide application ordinances, there will still be legal battles all over the country that will cost companies and local organizations dearly in legal fees and time.

"A federal preemption law would have sent a clearer message to local governments who are dealing with lawsuits," said Delaney.

A positive aspect of the law for the industry, noted Delaney, is language that encourages states to establish training

standards for all technicians, including those who are not presently required to be licensed. — *Paul Schrimpf*

TORO GOES TO DISNEY WORLD

The Toro Company and Walt Disney World Sports have



Disney World's planned sports complex.

MISSION STATEMENT:

LAWN & LANDSCAPE magazine delivers superior, total coverage of the continually evolving professional lawn and landscape contractor market, from in-depth business trends and technical research reports to market analysis and new product introductions. For 17 years, L&L has provided industry presidents, business owners and top-level managers the most up-to-date information needed to effectively run their businesses.

Everywhere You Look - There We Are!



Ranked Among the Best Franchise Opportunities in America!

Success Magazine

GOLD 100

Entrepreneur Magazine

Franchise 500

Income Opportunities Magazine

Platinum 200

Business Start-ups Magazine

The Top 150

- Proven Leaders in the Lawn Care Industry
- 17 year Track Record of Successes
- In-depth Training
- Exclusive Territory
- Extensive Support

Call Roger Albrecht at: 1-800-982-5296



Sundance KID II Grinder



- **Totally Enclosed Grinding Action**-Safe and efficient.
- **Fewer Moving Parts** Equals Less Maintenance-Direct drive to rotor.
- **Portability**-Transport with 3/4-ton pickup. Excellent for curbside or job site grinding.
- **Positive Feed**-Hydraulic cylinder direct to feed roll and hammers.
- **Convenience**-Low 4'6" loading height.
- **Durability**-Grinder weighs 8,200 pounds. Rotor weighs 1,500 pounds.
- **High Capacity**-Up to 15 tons per hour.

P.O. Box 2437 • Greeley, Colorado

970-339-9322

USE READER SERVICE #11

USE READER SERVICE #12

joined forces on a state-of-the-art international sports complex at Walt Disney World in Orlando, Fla., which is slated to open in May of 1997.

The new complex will have natural turf playing surfaces for more than 30 sports, including baseball, track and field and softball.

The 200-acre complex will have a quadruplex that will be the spring training home of the world champion Atlanta Braves, plus a "town green" for ceremonies and public events.

Toro's role in the project will include providing turf maintenance equipment and computerized irrigation systems, as well as application of the company's turf feeding systems.

ASSOCIATION NEWS

A third-party administered drug and alcohol testing program offered by the **American Association of Nurserymen** will help contractors comply with regulations from the U.S. Department of Transportation requiring testing for CDL-licensed drivers. It has a buying group for lower test prices and also provides educational materials. Contact Bill Current at 703/764-0053 for information.

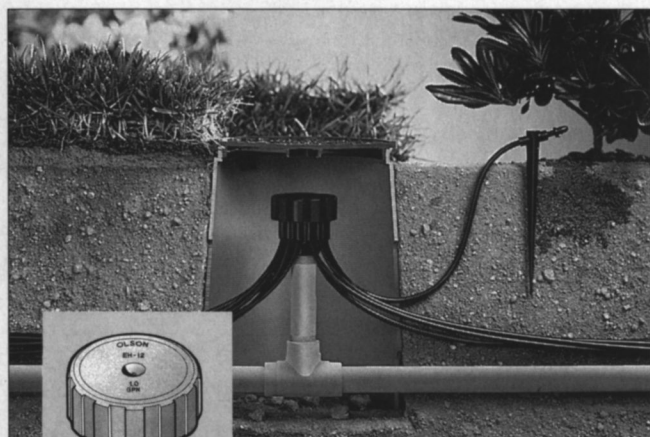
The **Professional Lawn Care Association of America's** Management Conference & Golf Classic will be held Jan. 17-19 in Tempe, Ariz. Management experts will present sessions on 1997's business outlook, motivating employees, performance evaluations,

compensation, recruiting and other management topics. Call 800/458-3466 for information.

The ALCA Educational Foundation has been formed by the **Associated Landscape Contractors of America** to award scholarships and fund educational programming in the landscape industry. Its goal is to reach \$500,000. For details, call 800/395-2522.

Turfgrass Producers International is offering members four different sets of 20 slides for educational presentations, company brochures and exhibit booths. The sets focus on environmental benefits, installation steps, beautiful lawns and sports actions. For more information, call 800/405-TURF.

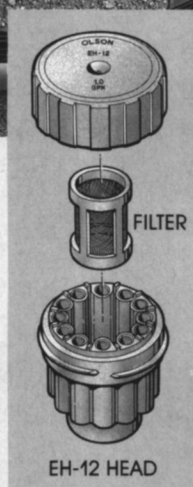
The **Irrigation Association** has assembled a slate of veteran speakers to highlight its 1996 Expo, Nov. 3-5 in San Antonio, and it expects record breaking attendance. Call 703/573-3551 for program details.



EH-12 EMITTER A BETTER IDEA BY DESIGN

A logical idea—Drip irrigation in a head—twelve individual pressure compensating outlets. The patent filter is built right into the unit and good filtration is what makes drip work.

Drip irrigation designed for landscape—not adapted to it. Call or write for more information.



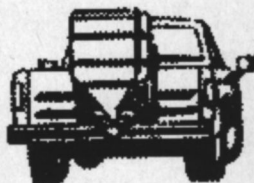
10910 Wheatlands Ave.
Santee, CA 92071
619 562-3100, 800 770LSON
FAX: 619 562-2724

USE READER SERVICE #13

SALT SPREADER

Pre-Season Special

*For Lawn & Landscape Readers
(You must mention this ad)*



Only \$749.00*

* Guaranteed Lowest Price
in the Country

6 Cu Ft Polyurethane Hopper-650 lbs Cap HD SEALED
Motor-In Cab Electronic Speed Control-Stainless Steel
Spinner Uses #1 or 2 Rock Salt and Calcium
Chloride-Spread Width from 3 to 50 ft.

**ORDER NOW-TAKE DELIVERY BY
NOVEMBER 1, 1996**

(\$100.00 Deposit Required)

CALL FOR DETAILS

**Don't forget your *FREE* 96/97 Discounted
Snowplow Parts Catalog**

HINIKER, MEYER & WESTERN SNOW PLOWS
Still at Preseason Prices

CALL NOW!

CENTRAL PARTS WAREHOUSE
1-800-761-1700

USE READER SERVICE #15

MARKET TRENDS

(continued from page 8)

IN BUSINESS...

L.R. Nelson Corp. purchased the assets of **Micro Process Applications**, Toulon, France... Bayer Specialty Products now offers a fax-on-demand service (800/842-8020) for turf and ornamental product information, MSDS and questions. ...**Nibco Irrigation Systems'** new interactive kiosks enable customers to learn more about the company's Pepco Professional low-flow irrigation products through in-store displays with touchscreens, audio and video tools...**Plant Health Care**, Pittsburgh, acquired **Industrial Services International**, Bradenton, Fla. 

TRANSITION

Sandoz Agro named **Berry Cothorn** turf and ornamental sales representative for the South region.

Chris Richburg is the new territory manager for Vigoro Corp. in Arkansas and parts of Alabama, Mississippi and Tennessee.

Promotions at the **Michigan Nursery and Landscape Association** include Amy Frankmann to vice president-education and expositions, Laurie Roinson to director of membership development and Tim Malatinsky to director of finance.

ISS Landscape Management Services hired **Paul Hickman** as vice president of its golf division.

DHM landscape architects promoted **Laura Kirk**, **William Bobzien** and **Daniel Kastelic** to associates.

James Quinn is a vice president for Plant Health Care after its merger with Industrial Services International.

Ball Seed named **Jerry Mahoney** director of supplier relations and **Barbara Terrell** account executive.

Nathan Wallace joined Vermeer Mfg. as a tree product demonstrator, while **Tom Ogle** was named grinder products manager.

Jacklin Seed added **Hagen Ledeboer** as the manager of grower services operations in Oregon.

Harvey Fell was appointed pond products group manager for Aquarium Pharmaceuticals.



Chris Richburg



Hagen Ledeboer

THE WORKING MAN'S CHOICE!



CONVENIENCE, SECURITY & SUPERIOR CONSTRUCTION!

Standard features of the DYNA-VAULT™ tool boxes include remote keyless entry, built-in security system and an interior/exterior work light.

Built by Douglas Dynamics – the world's largest snowplow manufacturer.



800-411-DYNA

USE READER SERVICE #16

Lawn & Landscape

SERVING THE \$10 BILLION PROFESSIONAL LANDSCAPE CONTRACTING INDUSTRY

READER
SERVICE CARD
9/96

Name _____

Title _____

Company _____

Address _____

City _____ State _____ Zip _____

Phone # _____

1. Do you wish to receive (continue to receive)

Lawn & Landscape magazine?

☐ YES ☐ NO

Signature (required) _____ Date _____

2. What is your primary business at this location? (please check one)

CONTRACTOR or SERVICES:

- ☐ Landscape Contractor (maintenance & installation)
☐ Chemical Lawn Care Company (excluding mowing maintenance service)
☐ Lawn Maintenance Contractor
☐ Ornamental Shrub & Tree Service
☐ Irrigation Contractor
☐ Landscape Architect
☐ Other Contract Services (please describe): _____

IN-HOUSE LAWN CARE/MAINTENANCE:

- ☐ In-House Maintenance including:
 Educational Facilities, Health Care Facilities,
 Government Grounds, Parks & Military
 Installations, Condominium Complexes,
 Housing Developments, Private Estates,
 Commercial & Industrial Parks.

DISTRIBUTOR/MANUFACTURER:

- ☐ Dealer ☐ Formulator
☐ Distributor ☐ Manufacturer

OTHERS ALLIED TO THE FIELD:

- ☐ Extension Agent (Federal, State, County, City, Regulatory Agency)
☐ School, College, University
☐ Trade Association, Library
☐ Others (please describe): _____

3. What were your approximate 1995 revenues?

- ☐ 0 - \$50,000
☐ \$50,001 - \$100,000
☐ \$100,001 - \$250,000
☐ \$250,001 - \$500,000
☐ \$500,001 - \$1 million
☐ + \$1 million

4. How many of your employees are:

- _____ Full time _____ Applicators
 _____ Seasonal _____ Maintenance

5. What percentage of your business is:

- _____ % Commercial/Industrial
 _____ % Residential
 _____ % Gov't/Municipal
 _____ % Golf

FREE INFORMATION

1	21	41	61	81	101	121	141	161	181	201	221	241
2	22	42	62	82	102	122	142	162	182	202	222	242
3	23	43	63	83	103	123	143	163	183	203	223	243
4	24	44	64	84	104	124	144	164	184	204	224	244
5	25	45	65	85	105	125	145	165	185	205	225	256
6	26	46	66	86	106	126	146	166	186	206	226	246
7	27	47	67	87	107	127	147	167	187	207	227	247
8	28	48	68	88	108	128	148	168	188	208	228	248
9	29	49	69	89	109	129	149	169	189	209	229	249
10	30	50	70	90	110	130	150	170	190	210	230	250
11	31	51	71	91	111	131	151	171	191	211	231	251
12	32	52	72	92	112	132	152	172	192	212	232	252
13	33	53	73	93	113	133	153	173	193	213	233	253
14	34	54	74	94	114	134	154	174	194	214	234	254
15	35	55	75	95	115	135	155	175	195	215	235	255
16	36	56	76	96	116	136	156	176	196	216	236	256
17	37	57	77	97	117	137	157	177	197	217	237	257
18	38	58	78	98	118	138	158	178	198	218	238	258
19	39	59	79	99	119	139	159	179	199	219	239	259
20	40	60	80	100	120	140	160	180	200	220	240	260

6. Circle what percent of your business is:

Lawn Care	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Maint. Serv.	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Irrigation Serv.	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Pest Control	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Installation	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Trees & Ornmtls.	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

7. How much did your company spend in 1995 on?

Turf Chemicals \$ _____
 Ornamental Chemicals \$ _____
 Equipment \$ _____

8. How many does your business operate?

- _____ Walk Behind Mowers
 _____ Riding Mowers
 _____ Trimmers
 _____ Chain Saws
 _____ Blowers

Please
provide all information for
processing.

Lawn & Landscape

☐ Check here for a free sample issue of *T&O Service Tech*, the only magazine for front-line service professionals.

FREE

PRODUCT INFORMATION

For more information on advertised and featured products and services, circle the appropriate number on the card above, complete the required information and mail.



The leading management magazine serving the professional landscape contracting marketplace.

Lawn & Landscape

SERVING THE \$10 BILLION PROFESSIONAL LANDSCAPE CONTRACTING INDUSTRY

- ☐ Payment Enclosed ☐ Bill Me
☐ 1 Year \$30.00 ☐ 2 Years \$42.00
☐ Canada 1 Year \$35.00
☐ Foreign 1 Year \$98.00
☐ Foreign Airmail 1 Year \$218.00

Date _____

Name _____

Phone _____

Company _____

Address _____

City _____ State _____ Zip _____

☐ Check here for a free sample issue of *T&O Service Tech*, the only magazine for front-line service professionals.

1. WHAT IS YOUR PRIMARY BUSINESS AT THIS LOCATION?
 (Please check only one.)

I. CONTRACTOR or SERVICES:

- ☐ 1. Landscape Contractor (maintenance & installation)
☐ 2. Chemical Lawn Care Company (excluding mowing maintenance service)
☐ 3. Lawn Maintenance Contractor
☐ 4. Ornamental Shrub & Tree Service
☐ 5. Irrigation Contractor
☐ 6. Landscape Architect
☐ 7. Other Contract Services (please describe) _____

II. IN-HOUSE LAWN/CARE MAINTENANCE

- ☐ 1. In-House Maintenance including: Educational Facilities, Health Care Facilities, Government Grounds, Parks & Military Installations, Condominium Complexes, Housing Developments, Private Estates, Commercial & Industrial Parks.

III. DISTRIBUTOR/ MANUFACTURER:

- ☐ 1. Dealer
☐ 2. Distributor
☐ 3. Formulator
☐ 4. Manufacturer

IV. OTHERS ALLIED TO THE FIELD:

- ☐ 1. Extension Agent (Federal, State, County, City, Regulatory Agency)
☐ 2. School, College, University
☐ 3. Trade Association, Library
☐ 4. Others (please describe) _____

2. What best describes your title?

- ☐ Owner, Pres., Vice Pres., Corp. Officer
☐ Manager, Director, Supt., Foreman
☐ Agronomist, Horticulturist
☐ Entomologist, Plant Pathologist
☐ Serviceman, Technician
☐ Scientist, Researcher
☐ Company, Library copy only
☐ Other (please specify) _____

9/96

Place
Stamp
or
Meter
Here

Lawn & Landscape

SERVING THE \$40 BILLION PROFESSIONAL LANDSCAPE CONTRACTING INDUSTRY

PO BOX 5817
CLEVELAND, OH 44101-0817



BUSINESS REPLY MAIL

FIRST CLASS MAIL PERMIT NO 1322 CLEVELAND OH

POSTAGE WILL BE PAID BY ADDRESSEE

Lawn & Landscape

PO BOX 5817
CLEVELAND OH 44101-9867

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



LANDSCAPE NOTEBOOK

PROJECT CHALLENGE: The magnificent Delta is the newest addition to the Opryland Hotel Convention Center in Nashville, Tenn. An indoor garden, 4.2 acres in size, stands at its center. Installation of the garden was performed in the spring of this year by Rentokil Inc., which previously installed the 2.5-acre Cascades Water Garden and the 2.0-acre Victorian Conservatory at Opryland.

The project includes a 20,000-square-foot antebellum style mansion, which is a restaurant that can seat up to 400 people; twin grand staircases at the mansion's front that overlook a 100-foot wide waterfall; a winding 1/4-mile long river to accommo-

date flat-bottom boats; a reflecting lily pond; a wedding pavilion; an island of multi-level buildings with shops and dining areas; and an 85-foot fountain bordered by steps and tiered planter beds.

Parts of the project could not be reached by crane and in some cases, plants had to be brought in by forklift before the concrete floor was poured for the base of the riverbed. Construction and traffic within the

LANDSCAPE NOTES

The installation project was 12 weeks from start to finish and was delivered two weeks ahead of schedule. When the garden was complete, the crew had off-loaded 44 semi trucks of plants.

PROJECT:

Opryland Hotel Convention Center, Nashville, Tenn.

LANDSCAPE COMPANY:

Rentokil Inc., Riverwoods, Ill.

PROJECT MANAGEMENT:

Denise Breitfuss, Rentokil Inc., Riverwoods, Ill. Chester Phillips, Rentokil Inc., Atlanta, Ga.

LANDSCAPE DESIGN:

Hollis Malone, Director of Horticulture Opryland USA

SIZE OF PROPERTY:

4.2 acres under glass

PLANTS INSTALLED:

44 semi trucks of plants, 379 specimen trees, 8,100 understory plants

PROJECT DURATION:

12 weeks with a 10-man crew



riverbed increased as construction progressed. More than 1,500 tradespeople worked side by side with concrete trucks, forklifts and cranes to meet the construction schedule.

CLEVER SOLUTION:

Almost three years after construction began, the glass dome above the gardens was com-

plete and Rentokil people came on site. Installation began in the palm court just outside the new convention center. Tall Sabal palms were moved by crane and planted along the walkway.

Large trees were brought in on flatbed trucks and skillfully maneuvered into position. Olive trees 35 feet tall and weighing 16,000 pounds each and had to be shipped in 8-foot by 8-foot crates.

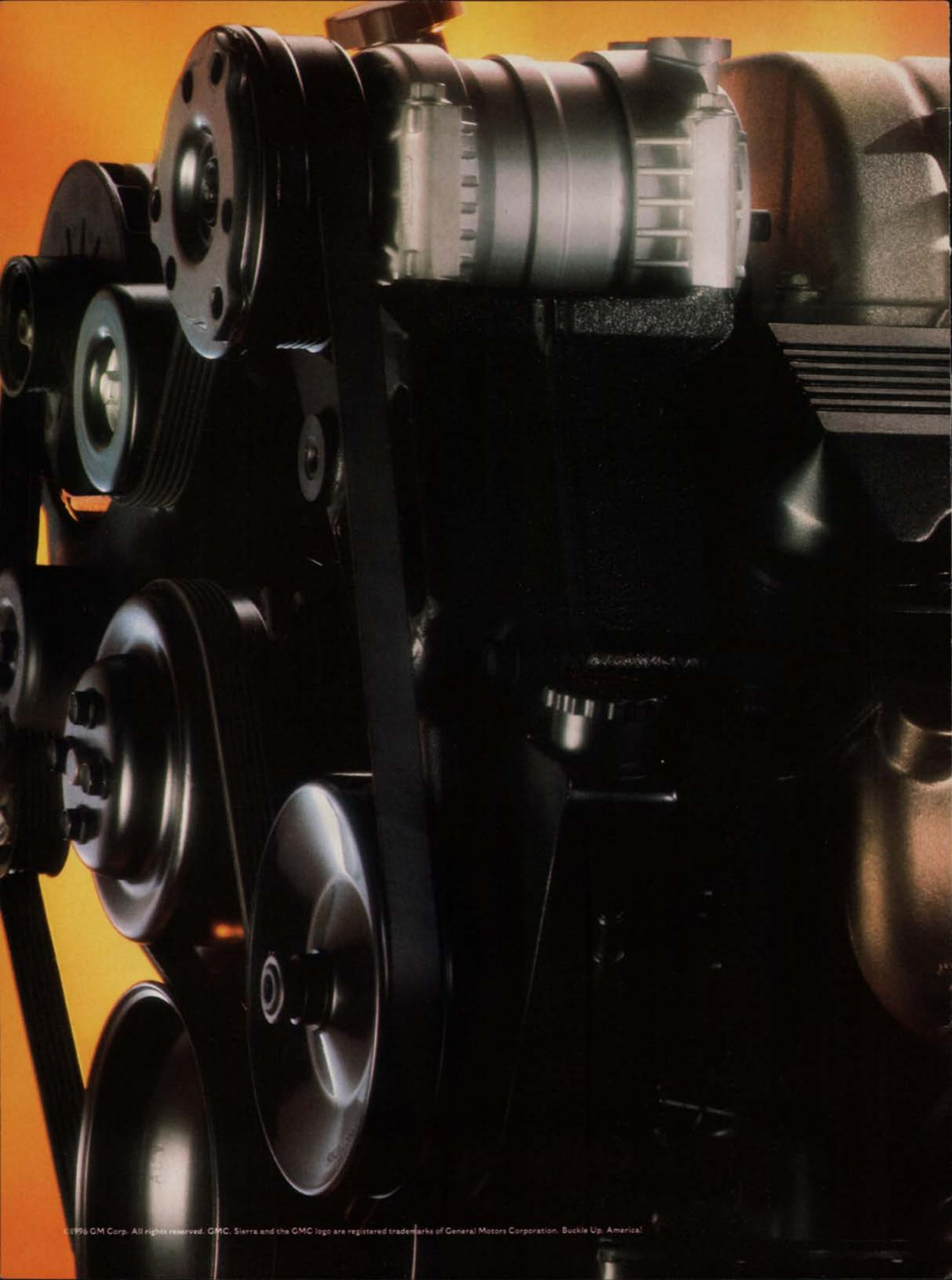
Dozens of trees were rigged and hoisted by various methods. Rentokil built temporary bridges to extend into the riverbed where a forklift could lift trees above to the crew. Some trees had to be hoisted several times to reach planters at higher elevations. Once in position, the palms were stood by hand to an upright position. —Denise Breitfuss



(Above) Not all trees had the luxury of mechanical assistance for planting. Large podocarpus trees in the cavities of the riverbank cliffs had to be lowered by hand to the planting crew below. The workers were tied off with repelling lines on the steep cliffs.

(Left) Rear planting areas of the Upper Delta required that trees be lifted to the upper elevation of the riverbank by a telescoping forklift. Once above the river, the trees were transported by hand on pallet jacks along winding pathways and steep inclines. Credit: Rentokil

The author is national project manager at Rentokil Inc., Riverwoods, Ill.



YOU HAVE THE POWER TO RUN YOUR BUSINESS; SIERRA HAS THE POWER TO ACCELERATE IT.

When you're managing a business, you have to be versatile. That's why Sierra offers such a wide range of powerplants. There are four Vortec gas engines—a V6 and three V8s. These strong Vortec engines have been refined and enhanced, detail by detail, to make them more powerful than ever. And there's yet another choice: Sierra is the only pickup under 8600 pounds GVWR to offer a diesel engine¹—a 6.5L V8 turbo diesel, no less.

Small Details, Powerful Advantages.

Considered by itself, a serpentine drive belt is just a detail. And so is a platinum-tipped spark plug, a sequential fuel injection system or coolant that is designed to last 100,000 miles. But when they're all combined in our Vortec engines,

they can give the GMC Sierra, and your business, a powerful advantage. In fact, Sierra can go 100,000 miles before its first scheduled tune-up².

Managing Your Trucks Is Like Managing Your Business: Every Detail Counts.

Sierra's wide range of highly refined engines is just one example of the attention to detail that goes into every pickup GMC sells. GMC trucks are engineered to save you time and money—so you can take care of your business, not your trucks. For more information and a catalog, see your GMC dealer, call 1-800-GMC-8782 or visit www.gmc.com on the web. You and Sierra have the power to keep your business running smoothly.

¹Excludes other GM vehicles. ²See your Owner's Manual.

GMC

COMFORTABLY IN COMMAND™



Service, quality and innovation have kept Teufel Nursery at the top of the green industry in the Pacific Northwest for more than a century.

By Paul Schrimpf



Surviving for more than a century in the business world requires planning today to ensure that the future is secure for years to come. Teufel Nursery, headquartered in Portland, Ore., has thrived by trying new services and embracing innovations to make the company more successful.

Starting out in 1890 as a local wholesale nursery, Teufel pioneered nationwide plant material distribution in the Pacific Northwest. Much more recently, Teufel launched a landscape construction and maintenance firm.

After 13 years, landscape division manager Rick Christensen and his group of managers turned a new venture into a \$13.9 million operation, performing construction, irrigation and maintenance services for landscape clients out of two main branches — one in Portland, the other in Seattle.

Christensen said success comes when the owners, managers and employees all work for the same goal — maintaining the highest level of service and quality, and making decisions that help the company in the long run.

MASTERS OF INNOVATION. Throughout the company's history, the family owners of Teufel Nursery have tried to put the company out front by experimenting with technology and testing new methods of business against the status quo.

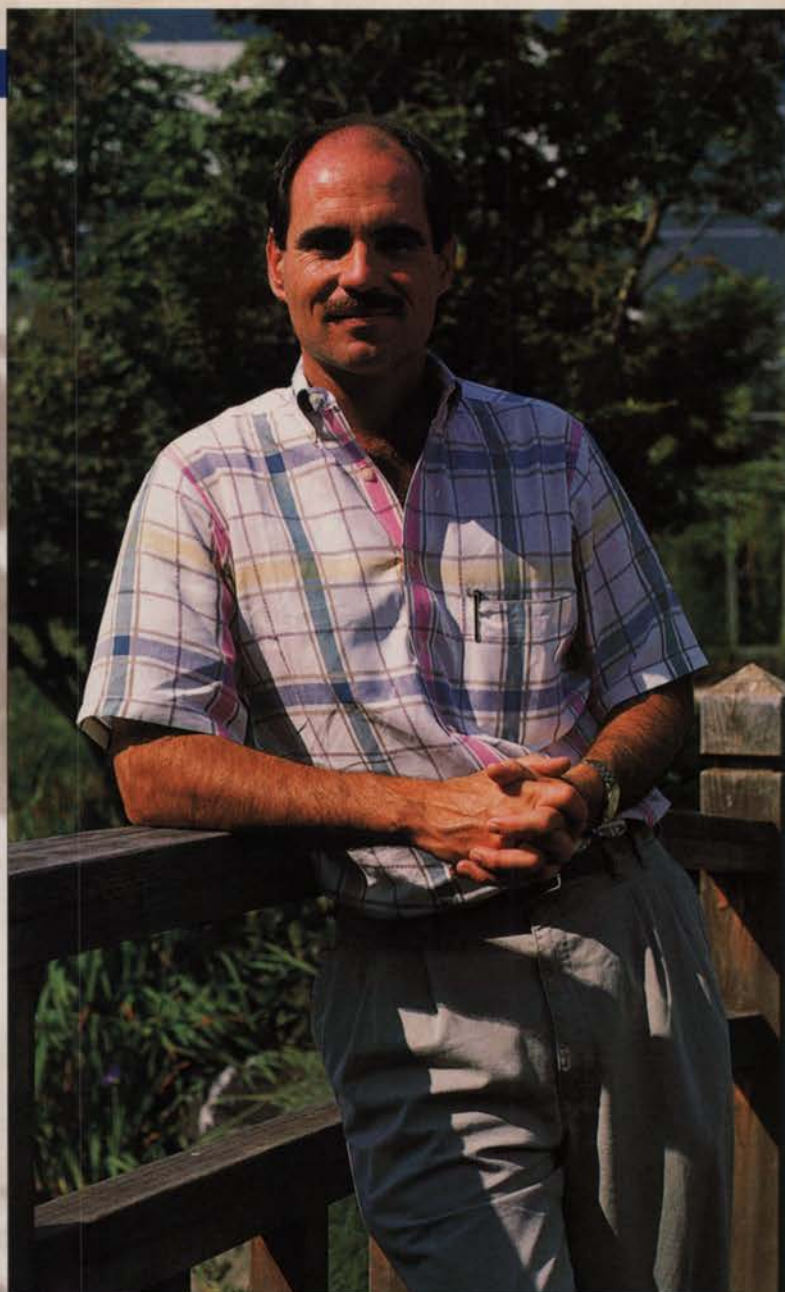
In 1890, self-taught gardener Gustav Teufel founded the company as a wholesale nursery after years of taking plant cuttings back to his greenhouse to propagate. His son, George, took the company a step further in the 1920s. He saw a potential market for growing live plant material to use in Christmas products, and set out growing hundreds of acres of English holly. Eventually, the project evolved into national distribution.

With a national distribution network in place, George began offering a wider range of plants and florists' supplies to customers. Then his son, Alfred, developed the nursery business, growing larger plant material and shipping it out of state via the rail system, one of the first companies in the state to ship to customers outside Oregon. Alfred also aided smaller nursery in the area and added to the company's business by buying their plant material and reselling to long distance customers using

(Above) Founder Gustav Teufel, right, and his son George laid the groundwork for Teufel to become a green industry giant in the Pacific Northwest. (below and left) Gustav Teufel in his company's early years delivering plant material to his customers. Credit: Teufel Nursery



All For One



Rick Christensen, manager of Teufel Nursery's landscape division, brought the division from ground zero to a leader in commercial landscape construction and maintenance. Credits: Charlie Ralph, Lake Oswego, Ore.

Teufel's distribution system.

Alfred's last major addition to Teufel was the creation of a wholesale horticultural supply division.

Larry, the fourth generation, made his contribution by starting up the commercial landscape business in 1983. Christensen, a recent college graduate at the time who was originally hired as the sales manager for the plant division, was chosen to head the effort.

THINKING BIG. The idea of opening up a landscape construction and maintenance

division was originally a solution to sluggish nursery sales in the early 1980s. "The landscape division became another means for us to sell our nursery stock — by actually doing the installation ourselves," said Christensen.

One of the pitfalls with planning a strategy to grow the new division was that area landscape contractors who buy from Teufel could become their competition. To avoid this, Larry Teufel and Christensen planned to take on only large, complex jobs.

"We started out with some tremendous advantages," explained Christensen. "We had

Teufel Nursery Inc.

HEADQUARTERS: Portland, Ore.

BRANCHES: Seattle, Wash., and a satellite office at the headquarters of Microsoft Corp.

FOUNDED: 1890 by Gustav Teufel

OWNER: Larry Teufel, the fourth generation of the family to own the business.

PRIMARY SERVICES: The landscape division of the business includes landscape construction and maintenance, irrigation design and installation. Nearly 100 percent of the division is commercial, and projects include golf courses, office complexes and corporate campuses.

EMPLOYEES: Approximately 260 landscape division employees covering all locations.

1995 LANDSCAPE SALES: \$13.9 million

1996 PROJECTION: \$14.6 million

Executive Summary

THE CONCEPT: Meet the customers' needs before everything else, producing high quality work at every site. Make decisions that will be best for the company in the long term.

FUTURE CHALLENGES: Competing for qualified labor force with the explosion of high-tech job opportunities in the Pacific Northwest. Solving environmental issues related to landscape maintenance, such as reducing pesticide inputs and green waste.

Division Manager

RICK CHRISTENSEN

AGE: 38

BACKGROUND: Started with Teufel in 1983 as sales manager in the plant department after graduating with degrees in horticultural science and landscape architecture. He was chosen to start the new landscape construction and maintenance division within a year.

On Target



Harley

Harley PRO Series and Harley Power Box Rakes® are the most versatile tool you can use for any site prep job. They're available for skid steer or tractor 3-point mount.

Hitch up to a Harley! Here's a power rake that can take a rough grade and produce a picture-perfect seedbed time after time. Drop in the heavy-gauge end plates, and you can gather stones, trash and debris into a pile.

All PRO Series and Power Box Rakes can windrow debris or spread topsoil left or right. Skid steer mounted rakes operate forward or in reverse.

The carbide tipped power roller is ideal for lawn renovation. Harley handles it all -- dethatching, weed and old lawn removal, and soil pulverizing.

Get on target! See your Harley dealer today about the most versatile attachment for skid steers or tractors.

Harley - the versatile attachment!

Glenmac

Jamestown, ND 58402

1-800-437-9779 / 701-252-9300

FAX 701-252-1978

USE READER SERVICE #19

cover story

resources in terms of horticultural supply and plant material, we were large enough to handle projects requiring high quantities of plant material, plus we have a tremendous reputation in the nursery industry for quality."

Taking on larger, more challenging projects other companies would find difficult, if not impossible, allowed Teufel to fill a market niche and establish a reputation in the landscape construction market more quickly.

The first six months of the landscape division's life, however, were a baptism by fire for Christensen. Like many new operators, he was doing most of the planning and financial work. In the meantime, he searched for the job that would break the company into larger opportunities. The main focus was on public sector opportunities.

COMMERCIAL BREAKTHROUGH. The big break came when Teufel won a major landscape construction contract for Portland's airport. Christensen found himself hiring 24 people immediately and purchasing heavy equipment. The fledgling division was on its way.

Other public sector jobs followed, and Teufel's reputation for complex jobs grew. In 1986, the company landed the construction and maintenance contract for Microsoft.

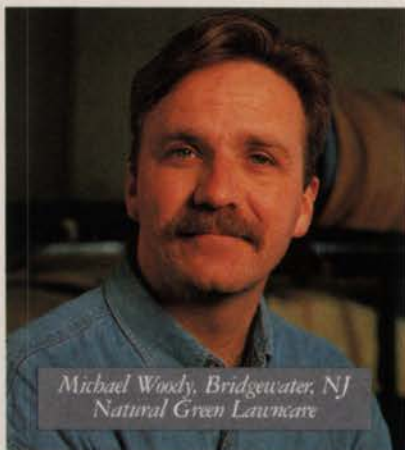
When Teufel started working with Microsoft, it wasn't nearly as big as it is today. It was originally two buildings on a large parcel of land that has been developed over the years. Today, some 3.5 million square feet of landscape has been installed, and is being maintained, by Teufel.

"Microsoft has an incredible campus that is a big part of their recruiting process," said Christensen. "It is set up to imitate a college campus because the company recruits so heavily from the colleges." The landscape mix includes sports fields, private areas for eating and relaxing and water features.

Teufel performs maintenance and construction on the site through a satellite office that remains open all year. There are 19 employees assigned to maintenance, while from 10 to 30 employees are stationed there for construction projects, depending on the construction schedule.

The company works through a landscape architect who is a consultant to Microsoft.

(continued on page 21)



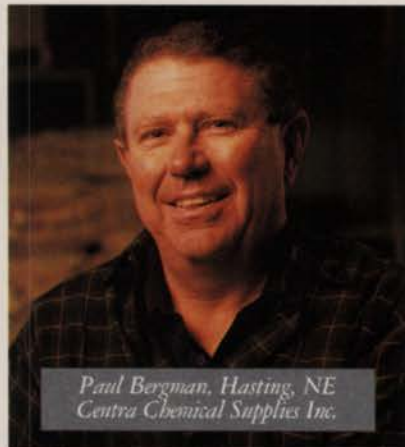
Michael Woody, Bridgewater, NJ
Natural Green Landcare

"When it's my investment and my reputation, Pendimethalin is my herbicide."



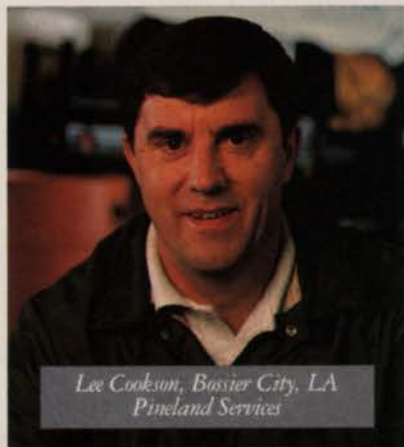
Mike McLain, Knoxville, TN
Emerald Green Landcare

"After a season of using Barricade®, I appreciate Pendimethalin more than ever."



Paul Bergman, Hasting, NE
Centra Chemical Supplies Inc.

"We want maximum performance against a wide spectrum of weeds all season long. We use Pendimethalin."



Lee Cookson, Bossier City, LA
Pineland Services

"In addition to delivering outstanding performance, Pendimethalin has helped my business grow by offering cash rebates for every purchase I make."

Take it from those who know. For broad-spectrum, season-long control and cost-effectiveness, no other preemergent turf herbicide can match Pendimethalin. For more information or for the distributor nearest you, call 1-800-545-9525.

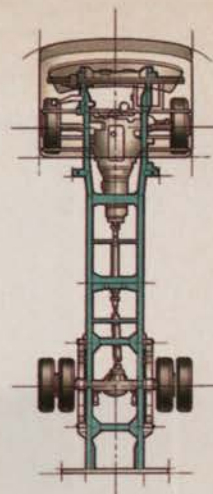
Pendimethalin

Nothing Beats Pendimethalin



Agricultural Products Division
Specialty Products Department
One Cyanamid Plaza, Wayne, NJ 07470

Work gets done faster once you put your back into it, and the new Isuzu NPR Gas V8 is certainly more than up to the task. It comes with a GVW rating of 13,250 pounds, over 27% higher than a Ford E-350.* In fact, what would be considered an overload in the Ford is all in a day's work for the extremely durable Isuzu truck. And everyone knows if you can haul around a lot more stuff, you



A ladder type frame is the ideal platform for a heavy load.

**MOST TRUCKS DON'T
HAVE THE SPINE
FOR THIS KIND OF WORK.**

make less trips and more money. Bingo. Cha-ching. Amen. The Isuzu truck not only carries more weight, it

carries more volume, with the ability to handle a larger cargo box than a van cutaway. The NPR also accommodates a variety of vocational set-ups, allowing you to put together anything from a stake bed to a tow truck. So if you're no stranger to heavy labor, get a truck with a good, strong back.

Call (800) 785-5445 xP103 for your nearest Isuzu truck dealer and free information kit.



ONE LESS THING
TO WORRY ABOUT



*1995 Ford Truck Source Book. ©American Isuzu Motors Inc. 1995

USE READER SERVICE #21

**YOU'VE READ THE AD,
NOW SEE THE MOVIE.**

- ☐ I would like more information on Isuzu's N-Series trucks. Please send my information kit to the following:

NAME _____

TITLE _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

TELEPHONE _____

TYPE OF BUSINESS _____

When do you expect to acquire a new truck?

- ☐ 1-3 months ☐ 4-6 months ☐ 7-12 months ☐ More than 1 year

Call us toll free at (800) 785-5445 xP1037



**Role in decision
process?**

- ☐ Make final decision
- ☐ Make final with others
- ☐ Advise, evaluate, recommend
- ☐ Don't know

Lease or purchase?

- ☐ Lease
- ☐ Purchase



BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 3159 ST LOUIS MO

POSTAGE WILL BE PAID BY ADDRESSEE



AMERICAN ISUZU MOTORS INC.
POST OFFICE BOX 140097
ST. LOUIS, MO 63114-9907

**NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES**



(continued from page 18)

"He calls the shots, and we deliver what is needed," noted Christensen. "It's a close team process, and because of the number of years we've been on the site, we have a lot of insight and are part of the decision making process. But ultimately, decisions about the site come from the landscape architect."

With a company like Microsoft, communication is important. One of the main ways that Teufel stays on top of maintenance issues and complaints is via electronic mail from the company's employees.

"Every person has a workstation, and each has our e-mail address," explained Christensen. "The employees help us monitor the maintenance of the landscape. It can be unnerving, but could you ask for a better monitoring system than 10,000 pairs of eyes?"

CORPORATE STRUCTURE. Working within the structure of a family business can be a chal-

lenge, but Christensen said the company's structure allows him to operate the division comfortably.

"It's not an overly structured environment here," he said. "We are given a lot of latitude by the owner for individual management styles."

"The family is very visible," he continued, "and they are at work every day, but it's a very large company and they don't spend a lot of time in any one division. Larry believes in leaving management decisions to the manager."

Remembering that the corporate philosophy is making decisions for the long term and maintaining a good reputation helps Christensen stay focused.

"Ensuring the survival of the business for the next generation is key," said Christensen.



The landscape division team stays in sync through weekly meetings and constant communication. Left to right: Tom Horn, Rocky Regula, Christensen, Frank Barbour, Mike Kaiser and Pat Enstrom.

"It's something we always keep in mind."

The landscape division itself is divided into departments for irrigation, construction and maintenance with a mini-division for residential work. Teufel will also construct an average of one golf course per year.

Each department has a manager, and the managers are supervised by an operations manager within each branch. "The responsi-

THE MODEL 3680 BEAST RECYCLER™

(patent pending)

...A HIGHLY EFFICIENT CUTTERMILL

- Reduces almost anything to useable size
- High production with modest horse-power
- A waste reduction machine that is affordable to operate
- Unique swinging cutters - regulates the size of cut and provides some protection for the cutters
- Processes difficult materials like stumps, housing demolition, wet newspapers and palm trees

BEFORE YOU PURCHASE ANOTHER
WASTE REDUCTION MACHINE,
...YOU MUST SEE THE 3680 BEAST RECYCLER!

BANDIT INDUSTRIES, INCORPORATED

6750 MILLBROOK ROAD • REMUS, MI 49340 PHONE: (800) 952-0178 OR (517) 561-2270 • FAX: (517) 561-2273



bility of performance at each division falls on their shoulders," said Christensen.

Keeping track of the departments is a major challenge for Christensen, and he spends the first day and a half of each week ensuring that each department knows where it stands for the week.

The first meeting every Monday morning is with the plant buyer to discuss what jobs are coming in and to make sure plants are ordered and delivered on time. Then, he meets with the sales and estimating crew to look at potential new jobs and the status of existing work.

Next, Christensen gets together with his counterparts at other divisions in the company to share any problems they have. The operations manager and department managers within the landscape division then meet to discuss employment, equipment and material needs.

Christensen's last executive meeting of

the week is with the sales and marketing manager, the senior estimator and the office managers to go over what was discussed at the landscape division meeting. Finally, he ends the day in a session with his foremen to discuss jobs in the field.

On Tuesday, Christensen has 15 minute one-on-one meetings with key managers to discuss any other problems. Every other week on Thursday and Friday he repeats the meeting schedule at the Seattle office.

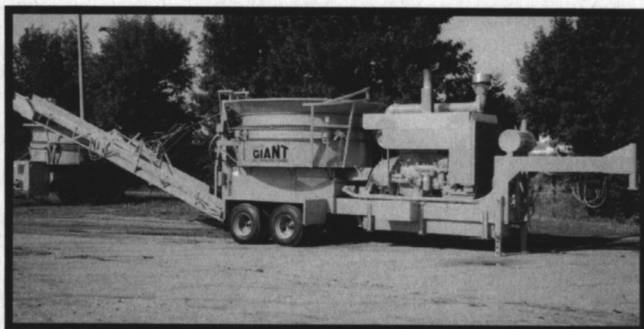
EMPLOYEE FOCUS. The Pacific Northwest is drawing many high tech companies that are thinning out the qualified employment base with comfortable work environments and opportunities for advancement, which makes Christensen's job more difficult. Employee hiring, retention and safety are

Throughout the company's history, the family owners of Teufel Nursery have tried to put the company out front by experimenting with technology and testing new methods of business against the status quo.

primary focuses at Teufel. He talked about it in a recent interview:

Q. How do you hire quality people?

A. I try to do as much of the recruiting and hiring myself as I can. I can't do it all but I enjoy being involved in the hiring and interviewing process and I take a lot of pride in putting together what I consider the best staff of people in this industry. We've retained a lot of our key people from the very



For 35 years, the Mighty Giant has set the standard for tub grinders. Innovations like the hydraulic opening tub and built-in loader fork have been available on the Mighty Giant since the early 1960's.

From the Model 2100 PTO Grinder to the Model 5100 Hydrafork with built-in loader, there is a Mighty Giant that is right for your operation.

**Mighty
GIANT**
Tub Grinders

- ◆ Hydraulic Opening Tubs for Easy Access to Screens and Hammers
- ◆ Optional Magnetic Head Pulley for Removal of Metals
- ◆ Available Multi-Function Remote Control
- ◆ Caterpillar Engines equipped with 5yr/5,000hr E.S.C.
- ◆ Financing available through Mighty Giant Lease Program 36, 48, 60 month terms available.

JONES MANUFACTURING COMPANY

P.O. BOX 38, BEEMER, NEBRASKA 68716

PHONE (402)528-3861 OR FAX (402)528-3239

USE READER SERVICE #23



DESIGN IMAGING GROUP

A Division of Bissett Nursery Corp.

Computer Imaging for the Landscape Industry

Why Do Our Competitors Keep Comparing Their Product to the ImageWizard?

Why not, DIG has set the industry standard for over 5 1/2 years!!

Ask about our NEW Scheduling and routing program, available NOW! and our Landscape Plan Design program available in August.

Produce full-color renderings in 30 minutes or less. (Shown here in black & white)



- 1,800 Image CD-ROM Library
- Easily Add To Database
- Thumbnail Image Library
- Easy-to-Learn & Use
- Move Objects Independently
- Photo-Realistic Printouts
- Video & Written Tutorials
- Free Technical Support

Come see DIG at the following shows:

• WESTERN NURSERY & GARDEN EXPO Oct. 23,24

Call for more information on DIG software products and receive your "Free Demo Video" and color print of an actual design.

For information call (516) 654-1600 or FAX (516) 654-8046

USE READER SERVICE #22

beginning of this division.

We spend a lot of time in interviews. I can't get to know somebody in 15 minutes, so I'll spend an hour and a half with a first interview and if I have a good feeling about that person, I will bring him or her back for a second or third time and invite key staff to meet the person.

Q. What do you do to expand the pool of potential hires?

A. We do a fair amount of recruiting of college students. We support local employment programs, we use the Associated Landscape Contractors of America Student Career Days and we get involved in internship programs at colleges. We've had students from as far away as Germany.

Q. Do internships generate employees for Teufel?

A. We have generated some employees. When we don't get the person back, they may end up talking to other students about their experience here, though, and we'll get more interest in internships. Hopefully, all the good internship experiences that students have will result in new employees, directly or indirectly.

Q. You mentioned that the company places high importance on safety. How so?

A. Along with weekly tailgate meetings, we post a large board at the employee entrance of each facility listing the current number of days we go without a lost time accident, and the all-time record for no lost time accidents. We provide cash incentives to employees for each month we go without a lost time accident.

We employ a full-time safety officer who coordinates a safety committee. The committee includes representatives from the entire company. They discuss safety issues and incidents monthly and record them so any employee can find out what's happening.

Q. What happens when accidents occur in the field?

A. We determine whether the employee was at fault and what action should be taken. Can we learn from it? If we can, we make it a topic for a future tailgate meeting. We also post notices on the safety board.

Q. How do you promote field safety?

A. We include safety gear in all the trucks. This includes orange cones, markers, flares,

signs, goggles and first aid kits that are inventoried every week.

We stress to employees that we are serious about safety and that there's no reason for accidents to occur. We try to demonstrate our emphasis on safety to clients and the industry.

Teufel Nursery is located at 12345 N.W. Barnes Avenue, Portland, Ore. 97229. The phone number is 503/646-1111, fax number is 503/644-2906.

The author is Managing Editor of Lawn & Landscape magazine.

SIMPLY THE BEST

Tree and brush chippers



▲ The E-Z Beaver Model 2070 is a heavy duty seven-inch capacity unit

First with the disc-style brush chipper . . . first again with the patented E-Z drum-style brush chipper. Morbark remains on the leading edge of chipper technology today. Thousands of customers have turned to Morbark over the years for simple, dependable, heavy duty wood chippers . . . no fancy gadgets, just solid machines designed to last. We thank you for your past business as we continue to make every effort to earn your business now and in the future. The **2000 Series of E-Z Beevers** includes a full lineup of exciting new designs covering every size and price range to fit every waste wood disposal application and budget. Contact your E-Z Beaver dealer or call us direct for more details. Compare features, performance and production . . . we believe you'll discover the best value in an E-Z Beaver chipper from Morbark.

EXPECT IT FROM

MORBARK



E-Z Beaver Sales P.O. Box 1000 Winn, MI 48896 (800) 362-9010

USE READER SERVICE #24

LAWN & LANDSCAPE • SEPTEMBER 1996

23

Good News, Bad News

Ideal spring and summer weather brought most turf seed farmers a healthy crop in the Pacific Northwest. Still, demand will likely surpass available supply for many varieties.

By Paul Schrimpf



Winter floods, herbicide damage and a high slug population threatened some fields, but ideal spring and summer weather kept harvests at average to above average levels. However, low carryovers and other factors will keep total availability generally tight. Credit: Jacklin Seed Co.

If the predictions of seed marketers come true, the days of high surpluses in most turf seed varieties are over — at least for the next couple of years. Despite mostly above average yields in the Pacific Northwest this summer, quantities of turf seed in the supply pipeline will be the tightest they've been since the 1980s.

Seed marketers point to both higher demand and less acreage for growing many varieties as the primary reasons for the shortages. The popularity of overseeding in the Southeast is continuing to grow, expanding markets for perennial ryegrass and other species, while extensive heat and drought in the Midwest and Northeast last summer forced the replacement or renovation of many turf areas this past spring.

All this additional consumption has left little carryover supply for distribution to end users this fall and spring. So despite good harvest numbers this summer, supplies will mostly fall short of demand while prices will generally be stable to higher.

Art Wick, vice president of research and development with LESCO Inc., Rocky River, Ohio, noted that available acreage for crop production has gone down in part due to the rising price of wheat and other alternative cash crops that are more cost effective to grow than turfgrass. Farmers in a position to choose a crop will generally choose what will provide the best return on investment that fits into their crop rotation scheme.

STRONG FINISH. The turf growing season in the Pacific Northwest was fraught with peril. Floods, especially across western Oregon, were a primary concern for farmers with acreage along river banks because of the chance of weed seeds spreading where banks spilled over into fields.

As it turned out, flooding was not the problem many feared it might be. The real villain was the activity of herbicides used to control weeds.

Under certain weather conditions, the herbicides act against the turf crop, causing a reduction in the overall harvest. Unfortunately, the conditions favored herbicide damage, and there was some crop loss, especially in tall fescue and perennial ryegrass fields.

Another negative factor was an explosion of

Field Burning Is Still a Hot Issue

The practice of field burning has been used for years to clear turf production fields of stubble and weeds before the next growing season. And although legal restrictions in Oregon have forced the use of herbicides in place of burning for fescues and ryegrasses, Kentucky bluegrass growers primarily in Idaho and Washington have continued to use the burning method.

Authorities in Spokane, however, have started the process of prohibiting the practice of burning. An emergency rule mandates a one-third reduction in field burning this year, an additional one-third reduction in 1997 and a total ban in 1998.

Gayle Jacklin, assistant vice president with Jacklin Seed, Post Falls, Idaho, predicted a long term impact of 50 percent to 75 percent reduction in bluegrass yields coupled with a 50 percent to 75 percent increase in pricing to end users if the regulation stands. The quality and purity of the seed will be reduced, she said, and farmers will need to work harder to maintain their yields resulting in a loss of planted acres and higher prices.

Public hearings are under way, and the industry is continuing to lobby but it will not be known until later this year if the regulations will stand, change or be struck down.



the slug population that actually wiped out some fields, according to Keith Laxton, operations manager at Seed Research of Oregon, Corvallis, Ore.

The saving grace for turf farmers and marketers was outstanding spring and summer weather. Frequent spring rains gave way to summer heat and dryness, allowing fields to be swathed and seed to be cleaned with little difficulty. Only one mid-July cloudburst delayed the harvest by about a week in most areas, but it should not seriously hinder marketers' efforts to get the seed into the supply pipeline.

VIEWS FROM THE FIELD. While the overall reports from the field are good, some species performed better than others.

(continued on page 28)



WE DON'T
JUST DELIVER GRUB
CONTROL.
WE OVERNIGHT IT.



You know how much damage grubs can do once they begin feeding. So don't settle for an insecticide that stops grubs eventually. DYLOX® Insecticide delivers grub control posthaste. In other words, it's the fastest grub control available.

After grubs hatch and begin to feed, apply DYLOX. Within 24 to 48 hours, the grubs are dead. And since DYLOX has a very short soil residual, it's an insecticide you can feel good about using.

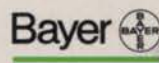
What's more, unlike other subsurface insecticides, DYLOX has no label restrictions on land-



scape and recreational turfgrass varieties or sites. In fact, with the 80% water-soluble powder formulation, you can even spray flowers, shrubs and trees and get first-class control of ornamental insect pests.

DYLOX is a low-odor compound and is also available in a 6.2% granular formulation. To find out more, contact Bayer Corporation, Specialty Products, Box 4913, Kansas City, MO 64120. (800) 842-8020.

And get fast grub control signed, sealed and delivered.



New Turf Problem Solvers

- ♦ Reduced turf clippings
- ♦ Aggressive tillering & fill in
- ♦ Improved mowing quality
- ♦ Very dark green color
- ♦ Better versus brown patch
- ♦ Durable under traffic
- ♦ Drought tolerant
- ♦ Sun or shade lawns



FALCON II
TURF TYPE TALL FESCUE

SOUTHERN CHOICE
TURF TYPE TALL FESCUE

RENEGADE
Turf Type Tall Fescue

MARKSMAN
DWARF
TURF TYPE
TALL FESCUE



"Seeds for the 21st Century"
Burlingham Seeds

E. F. Burlingham & Sons
P.O. Box 217
Forest Grove, Oregon 97116
800-221-7333 503-357-2141
Fax 503-359-9223

Quality Seed since 1914

seed harvest report

(continued from page 25)

Kentucky bluegrass producers said yields were outstanding this year. Dennis Combs, president of Combs Agriculture Consultants and vice president of Fine Lawn Research, Lake Oswego, Ore., estimated that common variety fields delivered 15 million pounds more seed than last year, and proprietary production came in 5 million pounds above 1995 levels. "It's been an extraordinary year for Kentucky bluegrass," said Combs. "It's been a solid performer all year."

"Quantities of Kentucky bluegrass, both common and proprietary, look very good," agreed Scott Harer, sales and marketing representative with Advanta Seed West, Albany, Ore. "Although I do see some shortages in sod quality seed."

"Bluegrass is yielding well," said Bob Richardson, general manager of Lofts/Great Western, Albany, Ore. "Commons should be in good supply, but proprietary varieties will be about the same as last year and should sell out as they have the past several years."

Tall fescues fared similarly well in pounds of seed per acre, but marketers say there's just not enough fields planted to fill orders.

Combs said his figures show a 5 million pound increase in tall fescues from 1995 to 1996, but a significant decrease in carryover from last year. "We went through close to 200 million pounds of turf-type tall fescue seed last year, and we won't have 150 million to sell this year," Combs predicted.

Another factor that should influence the price and availability of turf-type tall fescue is the disastrous crop failure of the Kentucky-31 variety, due to unfavorable weather conditions in Missouri, Tennessee and western Kentucky where the crop is grown. John Zajac, president of Zajac Performance Seeds, North Haledon, N.J., said the harvest was estimated at less than half normal production.

"I've heard that Kentucky-31 production is about half to 60 percent of normal levels," agreed Tom Stanley, director of marketing with Turf-Seed Inc., Hubbard, Ore. Stanley estimated prices on tall fescue will be up about 35 percent.

Perennial ryegrass supplies will also include about 5 million pounds less in carryover, despite average to above average yields of seed per acre. The species was

among the most damaged by herbicide use, but the outstanding spring and summer weather kept yields at or a bit above average.

Harer noted that demand for perennial ryegrass varieties has been extremely high, and expects that supplies will be very tight this fall and spring.

In fine fescues, Harer said that end users of seed have "finally used up years of inventory, and availability will be tight as well."

Individually, seed producing companies had their own observations about the seed harvest, pricing and availability this fall and spring. The following is a summary of their comments.

FINE LAWN RESEARCH, LAKE OSWEGO, ORE.

The harvest met or exceeded expectations across the board, but low carryover will make supplies short, Combs explained. He also reported the company is working with Michigan State University, East Lansing, to explore uses for Fine Lawn's Supranova poa supina bluegrass. The species, which is said to be both highly shade and wear tolerant, is being researched as a potential indoor sports turf in the future.

JACKLIN SEED CO., POST FALLS, IDAHO.

Gayle Jacklin, assistant vice president, said the current bluegrass crop is coming in above average on slightly less acres than 1995, and quality is good.

New varieties available this fall from Jacklin include two Kentucky bluegrasses. NuGlade features good leaf spot, rust and snow mold resistance and shade tolerance, according to Jacklin. BlueChip offers disease, heat and drought tolerance as well as good winter color and early spring green-up, she noted. Jacklin will also be offering a new Idaho bentgrass called GolfStar.

LESCO INC., ROCKY RIVER, OHIO.

Wick noted there are many factors keeping inventories of seed species low and end user cost high this year. The factors include low inventories from last year, low production acreage and the high price of alternative crops such as wheat. Other important issues are reductions in open field burning, reduced availability of some pesticides critical to the clean production of seed and unusual weather conditions in the Pacific Northwest.

Seed marketers point to both higher demand and less acreage for growing many varieties as the primary reasons for the shortages.

LESCO is offering two new tall fescue selections, Bravo and Stetson, that were screened under severe brown patch, pythium and low pH stress. Other selections include Line Drive and Stardance perennial ryegrasses, Defiance hard fescue and SunDance seeded bermudagrass.

LOFTS SEED CO., BOUND BROOK, N.J. Carryover of perennial ryegrasses and tall fescues are at an all-time low, according to Richardson. Tall fescue yields appear to be on the high side of average, but with no carryover and a bad K-31 crop the supply will fall well short of demand. Slug, chemical and flood damage should keep perennial ryegrass harvests down to average at best.

Lofts will offer the first major commercial production of its L-93 bentgrass and Laser II poa trivialis and will release its new line of four ryegrasses that were tested under the NPRH name. At press time, names for the varieties were still being selected.

PENNINGTON SEED, MADISON, GA. Ronnie Stapp, vice president of seed operations, said many of the company's varieties are booked and nearly sold out. "We're almost completely sold out of perennial ryes," Stapp noted.

Duster, a new turf-type tall fescue in its first commercial production, will boast extra dark green color and fine leaf texture, according to Stapp. Pennington will also introduce a new creeping red fescue, Flyer II, this fall.

THE SCOTTS COMPANY, MARYSVILLE, OHIO. Wet spring and dry summer weather, ideal for growing and harvesting turf seed, made up for the flood, herbicide and slug problems that nature brought upon perennial ryegrass and tall fescue fields early in the growing season, according to Kevin Turner, Scotts'

manager of seed research and production in Gervais, Ore. Harvests were average to above average, but quality may be in question due to weather that favored the persistence of poa annua in some fields.

Common Kentucky bluegrass harvests came in "solid," Turner noted, but a winter frost in regions of eastern Oregon kept proprietary varieties around average. Despite the positive

outlook, low carryover will mean tight supplies and stable to higher prices on these turf varieties.

Scotts will introduce two new varieties of perennial ryegrass, Majesty and Divine, featuring dark green color and fine texture.

SEED RESEARCH OF OREGON, CORVALLIS, ORE. Tall fescues had an average to somewhat better than average harvest, while fine fescues were a "mixed bag," according to Laxton. "Availability of seed will be tighter than it has been in several years," he said. A continued mild summer in the Midwest and East may ease demand to some degree.

SRO will present the first major commercial release of two perennial ryegrasses, SR 4400 and SR 4410, featuring disease tolerance and better persistence under heat and drought stress, according to Laxton. Also new this fall are SR 8210 and SR 8200 tall fescues, featuring low growth habit and fine texture.

TURF MERCHANTS INC., TANGENT, ORE. President Steven Tubbs said yields are looking average to above average, although the final harvest got a dose of rainfall that delayed cleaning and processing about a week. The delay set orders back a bit but should not affect seed availability to any great degree.

Turf Merchants is releasing a new poa trivialis, called Stardust, that it hopes will dent the overseeding market, as well as Zen, a new high quality seeded zoysiagrass.

TURF-SEED INC., HUBBARD, ORE. Yields on tall fescue were up, but Stanley said the poor K-31 crop and low number of production acreage will keep supplies tight and prices up. "Seed companies have attempted to get more areas planted, but at this point the

(continued on page 70)

The Original... And Still The Best



Make off-colored grass as green as early summer grass with Tru-Green Grass Paint. Tru-Green is easy to use and perfect for troublesome areas on athletic fields, golf courses and lawns. Tru-Green is the patented, water soluble grass paint specially formulated for use with conventional liquid sprayers. Tru-Green, the low cost, low maintenance way to make dormant, sparse or drought damaged grass green again.



Home of RegalStar™

REGAL CHEMICAL COMPANY
P.O. Box 900 • Alpharetta, GA 30201
Phone: 404-475-4837
Toll Free: 1-800-621-5208

USE READER SERVICE #26

LAWN & LANDSCAPE • SEPTEMBER 1996

29



One of the most popular uses for compost is amending soils that are to be seeded or sodded with turf. Many states are now choosing to include compost in their procurement legislation in hopes of creating markets for locally produced compost products. However, there is still a gap in many procurement processes, especially when it concerns specifications.

The landscape contractor or designer on each job needs a detailed point of reference — a specification — to follow. The specification must be simple and easy to follow without a lot of cumbersome red tape.



Smaller landscape areas can be topdressed by raking compost out into star shaped patterns using normal garden rakes. Credit: Rod Tyler

Agronomic, as well as economic benefits are causing more contractors to use compost for turf, topdressing and other landscape applications.

By Rod Tyler

ESTABLISHING TURF. Why use compost for turf establishment? Agronomic benefits include reducing compaction, increasing drainage, increasing nutrient exchange capacity, increasing moisture retention and reducing erosion potential of soils. Many contractors also claim using compost helps increase the speed and total percent germination of turf seed and increased knitting of roots for sodded projects.

Economic benefits include offering a product capable of enhancing project performance while reducing total costs. Because most soils lack the ideal level of organic matter, compost can provide this missing link while remaining affordable. Here is an example of possible economic savings:

TYPICAL ROADSIDE TURF ESTABLISHMENT PROJECT

- 15 acres of new seeding to be done in the median
- Current specification calls for a loamy topsoil to be added at a depth of 4 inches (the soil must have a pH of 6 to 8 and an organic content of at least 3 percent).
- Current subsoil is a clay loam with organic content of 2.8 percent.
- Cost of topsoil is \$10/yard delivered to the site.
- Compost is available at \$15/yard delivered to the site.

Most contractors will view the compost delivered at \$15 to be quite high on a per yard cost comparison. However, if the objective of the project is to establish turf and

(continued on page 32)

Compost Applications

Get Specific

Efficiency

is what we deliver.

Profits

are what you get.



WING PLOW

- Folding double-wing design allows a 20 foot plow to quickly & easily be reduced to under 10 feet!
- Ideal for malls, large parking lots, and airports
- Push & stack snow with one machine
- More efficient than 3 pickup trucks
- Designed for wheel loaders in 15-35,000 lb. class
- Hydraulically angles up to 35 degrees in either direction
- Available in 16, 18 and 20 foot widths



*Reduces to under 10 feet
in just minutes!*



"One-Pull"
snow removal eliminates
inefficient backdragging!



PULL PLOW

- Increase snow plowing efficiency by up to **50%!**
- Ideal for condos, townhouses, residential, circular driveways, and loading docks
- 2,000 lbs. down pressure scrapes pavement clean
- Works in combination with the front plow
- The entire plow can be removed in seconds
- Available in four sizes - 72", 80", 90", 96"
- Fits most 4WD vehicles from SUV's to 1 ton

DANIELS®
Pull Plow

15N365 Old Sutton Road, East Dundee, IL 60118

Dealer Inquiries Welcome

1-800-386-2932

Video and Financing available

LANDSCAPE FABRICS & EROSION CONTROL PRODUCTS

for the Professional Landscaper & Retail Garden Center

- **LANDSCAPE FABRICS**
 - WEED STOPPER
 - PROFESSIONAL LANDSCAPE FABRIC & PATIO UNDERLINER
 - WOVEN WEED RESTRICTOR
- **CONSTRUCTION FABRICS & FENCES**
- **BURLAP**
- **POLYJUTE EROSION CONTROL**
- **WOVEN GROUND COVER**
- **FABRISCAPE DRAINAGE SYSTEM**
- **FROST PROTECTION**
- **SECURING PINS**
- **KNIVES & REPLACEMENT BLADES**

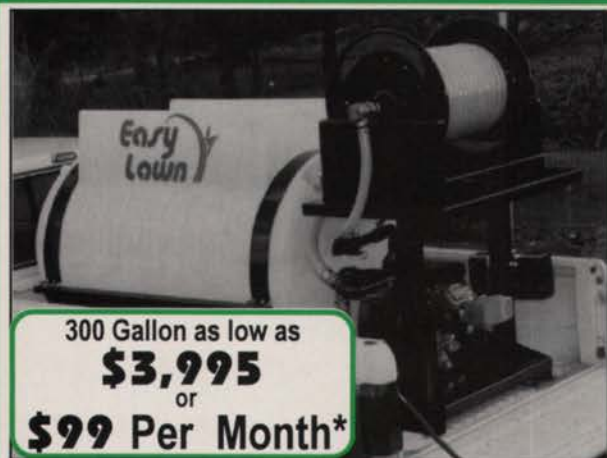


FABRISCAPE INC.

LANDSCAPE FABRICS & EROSION CONTROL PRODUCTS

3145 W. COLUMBUS AVE., CHICAGO, IL 60652
(312) 436-7400 • 1-800-992-0550 • FAX: (312) 436-0335

USE READER SERVICE #28



300 Gallon as low as
\$3,995
OR
\$99 Per Month*

The low cost Hydro Seeding Units
UTILITY SERIES - from Easy Lawn,

STARTING AT: Quality at an affordable price

HU303*	300 Gallon	8 HP Briggs	\$3,995
HU353	350 Gallon	8 HP Briggs	\$4,495
HU503	500 Gallon	8 HP Briggs	\$4,795
HU603	600 Gallon	8 HP Briggs	\$5,995
HU604	600 Gallon	16 HP Vanguard	\$7,995
HU724	720 Gallon	16 HP Vanguard	\$7,995
HU1004	1000 Gallon	16 HP Vanguard	\$9,995



Call for FREE Info!

800-638-1769

USE READER SERVICE #29

compost

Turf Establishment Specifications

DESCRIPTION:

This work consists of applying compost to native soil and rototilling the resulting layers to achieve a uniform blend capable of increasing the density and vigor of seeded or sodded turf areas.

MATERIALS:

Compost shall be dark brown or black in color, and capable of enhancing plant growth. 98 percent of the materials shall pass a 1-inch screen. There shall be no admixture of refuse (i.e., noticeable inert contamination) or other materials toxic to plant growth. The compost shall be free from foreign objects larger than 1 inch in diameter. Acceptable compost may be derived from strictly natural organic sources such as food or animal residuals, yard trimmings or biosolids. Acceptable ranges of test results for compost used for this application are listed below.

TEST PARAMETER

Pathogen/weed seed destruction
pH*
Heavy Metals

ACCEPTABLE RANGES

Proof of EPA minimum heating requirements (minimum of 55 degrees C for 5 days)
5.5 - 8.0
less than maximum limits established by EPA 503
30 - 75 percent (same products should vary less than 5 percent per year)
Less than 1/2 percent by weight
Material should be "cured" for at least 30 days
0 - 5 mmhos for sensitive plants
*Certain plant species may prefer various pH ranges and the final growing medium should be adjusted accordingly.

METHOD OF MEASUREMENT:

Compost will be measured by the cubic yard prior to dumping of site.

CONSTRUCTION GUIDELINES:

Compost should be applied at an average depth of 1 inch and incorporated to a depth of 5 inches using a rototiller or other device. Compost can be used to cover seed instead of straw, if applied at a 1/8- to 1/4-inch depth. Normal fertilization practices should begin once turf is six weeks old. Water thoroughly after planting.

(continued from page 30)

have it survive for a number of years, a 2-inch layer of compost applied to the current site and incorporated to a depth of 5 inches would work quite well.

TOPSOIL OPTION

Take a 4-inch application over 15 acres totaling 8,100 cubic yards.
8,100 cubic yards x \$10 = \$81,000
\$1/yard application cost = \$ 8,100
Total project costs = \$89,100

(continued on page 34)



Stabilized Nitrogen Week After Week.



Better Performance! Costs Less!

AgricoTurf® Gives Lange-Pro Fertilizers These Performance Advantages.

- **More Nitrogen:** AgricoTurf provides nitrogen in the stable ammonium form and slows conversion to the nitrate form. AgricoTurf minimizes denitrification, volatilization and leaching. Therefore, more of the nitrogen you're paying for is available to the grass.
- **No Coating:** AgricoTurf does not depend on a fragile coating and can be used in a dry or liquid form. You are assured of consistent nitrogen performance week after week.
- **Quality:** Superior ingredients and rigid manufacturing standards mean you get the same great results every time you use Lange Pro.

- **Choice of Products:** The Lange Pro Fertilizer line gives you a wide variety of standard or custom blends including fertilizer/pesticide combinations for your unique applications.
- **Proven Performance:** Since 1988, the experience of leading turf companies and university tests prove AgricoTurf consistently performs better than popular "slow release" nitrogen fertilizers.

Call Toll Free
1-800-862-6210
For Your Free Sample!

We are sure you'll love Lange Pro products with AgricoTurf. So we want you to try Lange Pro for FREE! Call Now! This is a Limited Time Offer While Supplies Last.

LANGE
Specialty Products Group
Lange-Stegmann Company
St. Louis, Missouri

USE READER SERVICE #42

(continued from page 32)

ALTERNATE COMPOST OPTION

Take a 2-inch application over 15 acres totalling 2,025 cubic yards.

2,025 cubic yards
x \$15 = \$30,375

\$1/yard application
cost = \$ 2,025

\$100/acre
incorporation cost = \$ 1,500

Total project cost = \$33,900

Seeding and fertilization costs have been removed from this example because they will be similar for both. Or will they? Remember, compost has a low level of fertility but when used in high volumes, can contribute significantly to soil fertility. Most of the nitrogen in compost is contained in the organic form and available over time as weather and soil conditions permit.

As a result, the project using compost will probably not need additional fertilizer as

long as the compost is mature and of high quality. Reducing the need for fertilizer costs on the compost option widens the margin in the example.

There are a number of variables to deal with in the above example. Obviously, both projects are weather dependent, but the compost option may be easier to complete in damp weather. Many contractors have used drier compost products for turf establishment, especially when operating in native soil on the borderline of being too wet. The addition of a 1-inch layer of compost helps soak up surface moisture and provides another layer for equipment to move around on (before the compost is incorporated) without getting stuck in the mud. Some contractors have actually used compost dumped in the barway to new sites

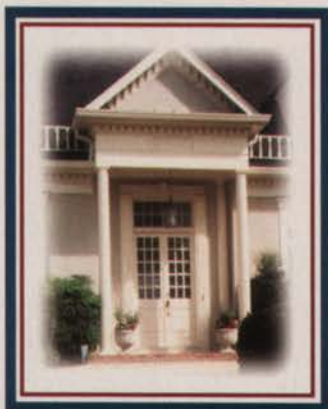
Agronomic benefits include reducing compaction, increasing drainage, increasing nutrient exchange capacity, increasing moisture retention and reducing erosion potential of soils.

and spread 2 inches deep for this purpose.

In many state DOT manuals, the word "compost" is not even listed in the materials sections, rendering the use of compost on any state project impossible unless a contractor is able to convince the project manager that compost is an "approved equal" to materials listed.

Take the specifications below and those

(continued on page 36)




Moving In. Moving Up. Settling Down.

"Our homes are our castles" has never been more true than it is today. America's trend toward cocooning means people are investing more money than ever before in their homes. And that means pride of ownership is at an all-time high. Lawn and landscape services are a viable and important option for more and more of these homeowners - reach them through Metromail. Metromail's realty information puts you in touch with America's homeowners, whether it's New Movers, New Homeowners or Established Homeowners. Use Metromail's Homeowner lists, including names, addresses, and even phone numbers to reach more prospective customers in your business area.

Homeowner Lists from Metromail...

For the prospects you need when your message needs to hit home.

Call Randy Tribble at
1-800-822-3282

 METROMAIL

The Cat's Out of the Bag



The Bob-Cat® ZT 200 Mows Circles Around Obstacles

The word is out, and the competition is as nervous as a cat. Ransomes® Bob-Cat® has developed a zero turning radius mower that cuts around landscaping as quickly as it works open areas. You spend more time mowing and less time figuring out how to mow.

Not only are trees and shrubs no obstacles to performance, but curbs are no challenge either. You can raise the deck to get over curbs without disturbing the cutting height adjustment.

Ask about our no payment, no interest special financing programs.



The 22-hp ZT 200 is as dependable as it is productive. It features the most durable 61" deck in the industry and carries an exclusive *three-year no crack warranty* to prove it. In addition, the ZT 200 comes with a *two-year no fail spindle warranty*.

For true zero turning radius productivity combined with proven dependability, there's only one animal for you: the Bob-Cat ZT 200.

Call 1-800-228-4444 for the name of the distributor nearest you.



**RANSOMES
BOB-CAT**
For The Best Results

BUILDING PROFITS FROM LIMB to LIMB



EAGLE 45 AERIAL LIFT

- Trailer-mounted, articulated aerial lift with a 25-foot side reach and 45-foot working height.
- Positive bucket leveling, 360 continuous rotation.
- Fully proportional hydraulic controls.
- Easy to operate and transport - pull it with your pickup truck.

AmeriQuip

1480 Arrow Hwy., La Verne, CA 91750
(909)392-2033 Fax (909)392-4651
(800)824-9776

USE READER SERVICE #32

compost

Turf Topdressing Specifications

DESCRIPTION:

This work consists of applying compost to existing turf to help increase organic matter, reduce compaction and increase the density and vigor of existing turf areas.

MATERIALS:

Compost shall be dark brown or black in color and capable of enhancing plant growth. 98 percent of the materials shall pass a 1/2-inch screen. There shall be no admixture of refuse (i.e., noticeable inert contamination) or other materials toxic to plant growth. The compost shall be free from foreign objects larger than 1/2-inch in diameter. Acceptable compost may be derived from strictly natural organic sources such as food or animal residuals, yard trimmings or biosolids. Acceptable ranges for compost used for this application are listed below.

TEST PARAMETER

Pathogen/weed seed
destruction

pH*

Heavy metals

Organic matter content

Inert Contaminants

Maturity/Stability

Soluble Salts (Conductivity)

ACCEPTABLE RANGES

Proof of EPA minimum heating requirements
(minimum of 55 degrees Celsius for 3 days)

5.5-8.0

Less than maximum limits established by EPA
503

30 - 75 percent (same products should vary
less than 5 percent/year)

Less than 1/2 percent by weight

Material should be "cured" for at least 30
days

0 - 5 mmhos for sensitive plants

*Certain plant species may prefer various pH ranges and the final growing
medium should be adjusted accordingly.

METHOD OF MEASUREMENT:

Compost will be measured by the cubic yard prior to dumping on site.

CONSTRUCTION GUIDELINES:

Compost shall be applied at an average depth of 1/4 to 1/2 inch and worked into
the turf using a grass rake, drag unit or other device. Water thoroughly after
application and follow normal fertilization practices.

(continued from page 34)

listed in *Lawn & Landscape*, July 1996, (page 72) and forward them
to your local landscape specifier or
compost manufacturer to help increase
the use of compost at the local level.
Slight changes to the specifications
may be necessary, but in general, most
quality composts will fall within the
confines of the values listed here. **LL**

*The author is a certified professional
agronomist and free-lance writer in
Medina, Ohio.*

COMPOST INFORMATION

The specifications in this article are
from Rod Tyler's book, *Winning the
Organics Game — The Compost Mar-
keters Handbook*, published by the
American Society for Horticultural
Science Press, Alexandria, Va. Tele-
phone is 703/836-4606.

Other composting resources are
available from The Composting Coun-
cil, Alexandria, Va., at 703/739-2401.

Registration and Exhibitor Information Available Now!

GIE Means More Business . . .

For you, your company and the industry! Here's How:

- ◆ Three national associations assemble for one big event!
- ◆ Sixty seminars on sales, management and technical topics!
- ◆ Three days of exclusive trade show hours—300 exhibits!
- ◆ Keynote address by the Rags to Riches Horatio Alger Award winner, Robert Farrell!
- ◆ Equipment demonstrations to "try before you buy!"

GIE's Proven Performance — the buyers come here!

- ◆ 94% of GIE attendees influence their company's final purchasing decision
- ◆ A typical GIE attendee plans to spend \$23,000 with exhibitors
- ◆ 60% of GIE attendee annual budgets exceed \$500,000, 43% are over \$1 million!

GIE brings the largest combined national exposition of the lawn, landscape and grounds management industries to Cincinnati, Ohio for five days of business-building meetings, seminars, and trade show—November 17 - 21, 1996.

Act now to exhibit or attend!

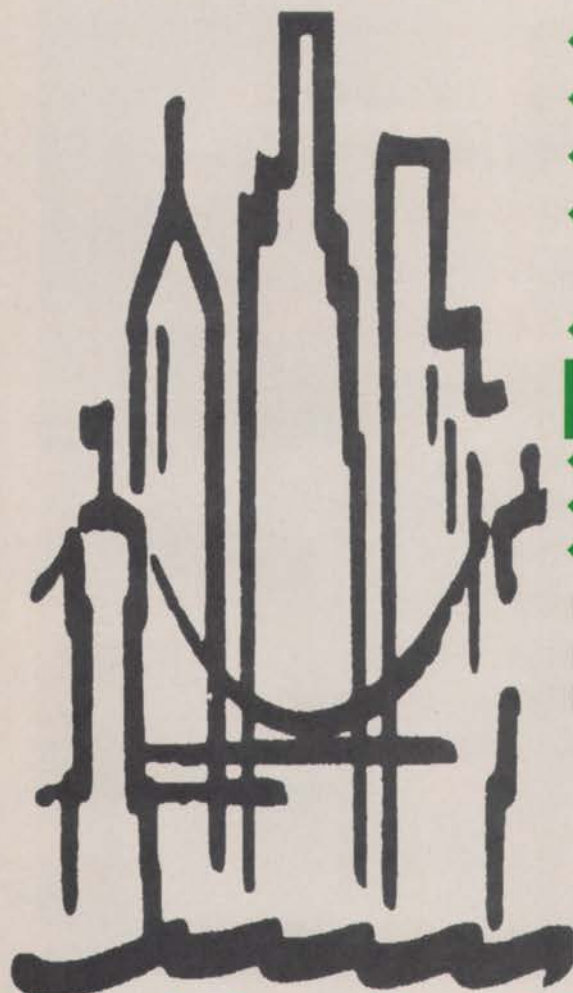
"Very educational. All the people offer different experiences, and experience is the best teacher. GIE is great—I found a uniform company and all the equipment I needed."

Homer Jackson, H.J. Lawn Service, Houston, Texas

"I see faces from all over the country. GIE is the only national show that targets the independent landscape contractor."

Bill Shea, Ferris Industries, Inc., Vernon, New York

Trade Show registration is FREE to conference attendees. Trade-Show-Only passes are available onsite for November 19 & 20 at \$15 per day. The Outdoor Equipment Demonstration on November 21 is FREE to all attendees!



Green Industry Expo/96

The National Expo for Lawn & Landscape Professionals

November 17-21, 1996~Cincinnati, Ohio



GIE is sponsored by:

PGMS - Professional Grounds Management Society

PLCAA - Professional Lawn Care Association of America

ALCA - Associated Landscape Contractors of America

YES! I want to know more about GIE/96

- ☐ Send me information on exhibiting!
- ☐ Send me information on educational programs!

Name: _____

Title: _____

Company: _____

Address: _____

City/State/Zip: _____

Phone: () _____ FAX: () _____

Clip and send to:

GIE, 1000 Johnson Ferry Rd, NE, Suite C-135, Marietta, GA 30068-2112

FAX: 770-678-8071

What began as a tool for developing financial statements has grown into much more as contractors take control of their accounting procedures.

By Bob West

Estimating modules eliminate many errors and help to make each job more profitable for contractors. Credit: CoRoN Corp.

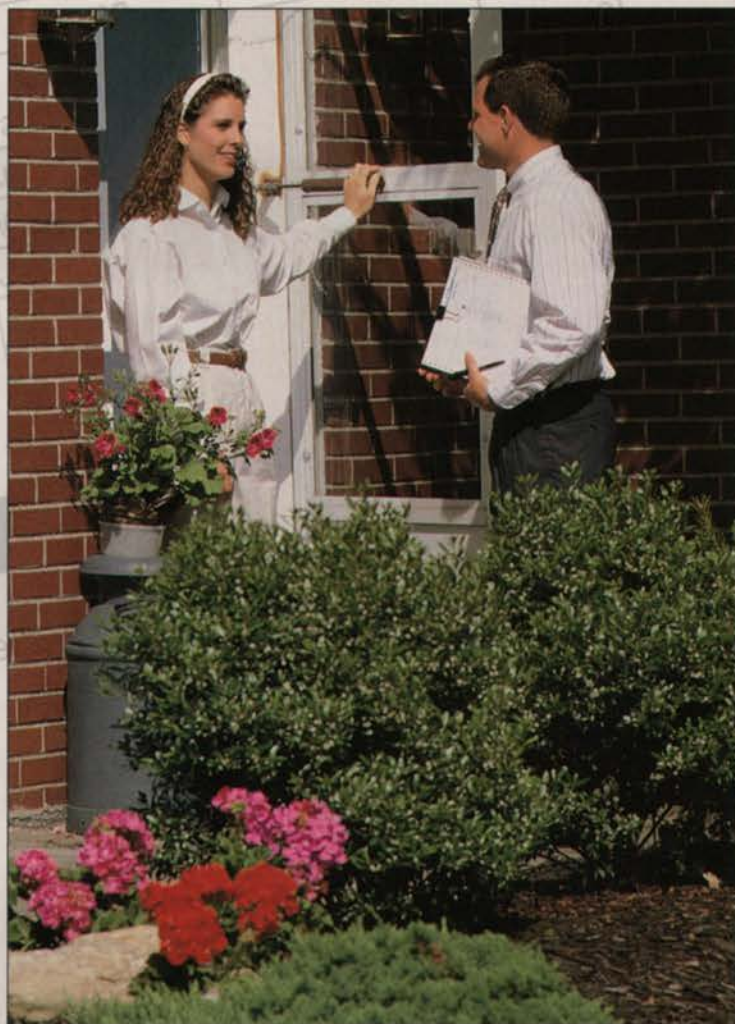


"We couldn't function without it," affirmed Dave Van Zelst, president, Van Zelst Inc., Wadsworth, Ill.

What single part of his company's business could be that important? Surely he must be referring to his fleet of trucks or his line of mowers, right? Wrong.

At Van Zelst, with its 100-plus employees and nearly 40 trucks, it's the company's accounting software making everything happen in a sensible and profitable manner.

What is this industry coming to when landscape contractors consider accounting software as important to their success as their mowers? It's coming to a



point in time where contractors embracing new technology will grow and thrive, while those refusing to recognize the changing climate of business itself may put themselves on the endangered species list.

"In this day and age, success is based on the technology we use," noted Van Zelst.

BEYOND THE BASICS. Accounting software has developed so rapidly since its introduction to the green industry in the late 1970s that calling it accounting software doesn't do it justice.

Larry Cantor, president of Computer Systems Approach, Fullerton, Calif., explained his company's basic package allows contractors to put all customer information on a route and schedule it, list equipment needed for each job, note special add-on services, automate monthly billing, create work or-

(continued on page 40)

Accounting for Everything

TURFGRASS ECOLOGY & MANAGEMENT

BY T. KARL DANNEBERGER, Ph.D

NOW AVAILABLE!

FINALLY, AN ADVANCED TURFGRASS MANAGEMENT BOOK

for the turfgrass professional which goes beyond the introductory level.

TURFGRASS ECOLOGY & MANAGEMENT

...is the first professional turf management text devoted to advanced environmental ecology. This pioneering work addresses the wave of the future and is a must for all professionals. Chapter highlights include discussions of light and nutrients as resources, physiological responses to temperature, population dynamics, predator disturbances and much more.

ORDER YOUR COPY TODAY.

Hardbound, single copies only \$28 plus \$2.50 shipping/handling per copy. *Special Price. Limited time only.*

YES, I'm interested in purchasing _____ copy(s) of **TURFGRASS ECOLOGY & MANAGEMENT**. I understand my purchase will be shipped upon payment. I also understand that I can return my book(s) within 15 days for 100 percent refund if I am not totally satisfied. (Ohio residents only add 7% sales tax.)

☐ Payment Enclosed

Charge my ☐ VISA ☐ MasterCard

Card # _____

Expiration Date _____

Signature _____

Name: _____

Title: _____

Company Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

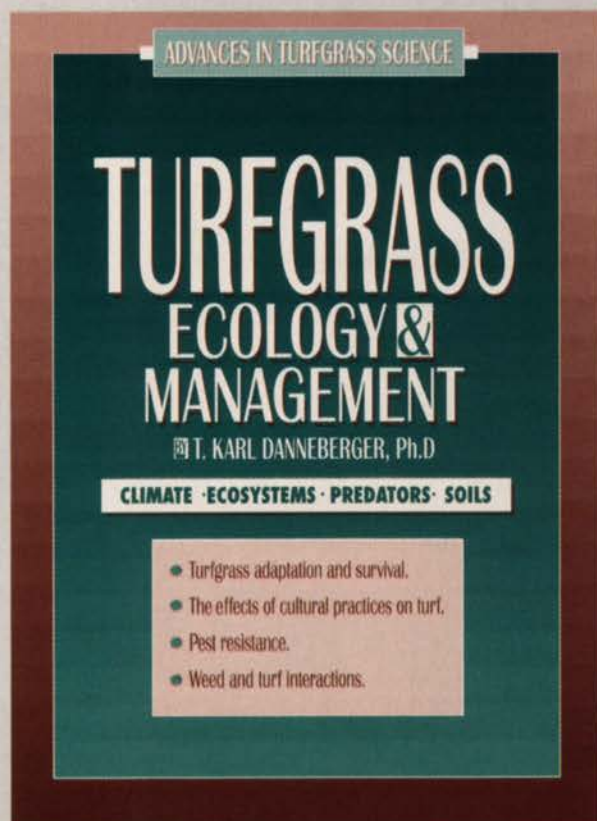
Published by:

Lawn & Landscape

4012 Bridge Ave.

Cleveland, OH 44113

Call 800/456-0707 for information on
volume, discount prices.



(continued from page 38)

ders for each job and convert them to invoices and general financial statements.

Most software vendors' products include similar offerings, as well as add-on modules contractors can use to supplement the system. "Computers are making a significant impact now as they get the right information

to the right person at the right time," noted Jim Huston, president, Smith Huston Inc., Orange, Calif., a green industry consulting firm. "All of this technology is being used to help contractors do their jobs in a more cost effective way."

"The beauty of a vertical market package is how it marries accounting and manage-

ment together so you're doing both at the same time," said Dave Tucker, owner of Sensible Software, Gaithersburg, Md. "Most of the work with our software is done when it indicates what jobs are scheduled for the day. Then, as you tell it the jobs were performed, the accounting is done automatically. The only accounting the contractor does is push a button once a month to print the bills."

Software vendors are also quick to emphasize the time savings contractors enjoy with these programs. "All the contractor has to do is input information on a timely basis," according to Steve Skuropacki, president, SPS Consulting, Cranford, N.J. "And every time bills get out on time, it will improve cash flow and make the company's image much more professional."

GIVE ME AN ESTIMATE. "Estimating drives a contractor, not accounting," declared Charles Vander Kooi, an industry expert on estimating practices and president of Vander Kooi & Associates, Denver, Colo. "It drives everything contractors do and must be done in a way that they can verify estimated values against real values, or else they may be losing money and have no idea why."

Estimating modules have become the heart and soul of accounting software because they simplify this important process for contractors and ensure the accuracy of bid proposals.

"Computers will never replace an estimator, and they can't estimate for you," Vander Kooi continued, "but they have a tremendous memory, so repetitive tasks can be stored and the contractor can use just the database and change the data for each job."

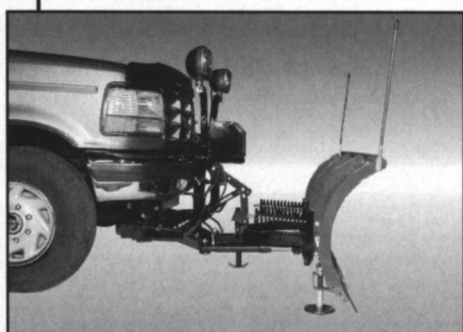
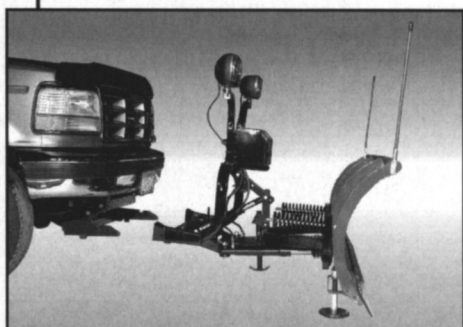
And as every contractor knows, the accuracy of a company's bids goes a long way to determining the health of its bottom line. "A contractor can only stand one bad bid out of five and survive, so anytime you can improve your bidding accuracy you increase your profits," said Vander Kooi. "A good system can take a contractor to just one bad bid out of 10 and let him or her process 20 to 30 percent more bids."

Tucker said that using estimating software is just one way contractors can get a solid grasp on their companies' complete financial situations. "All of the job profits

(continued on page 42)

Superior Snow & Ice Control

Hiniker Quick Hitch Snow Plow Mounting System



Fast & Easy!

Be ready to move snow in seconds with the Hiniker Quick-Hitch plow mount system. Self-aligning drive-in receivers and lever lock retaining pins make mounting easier than ever. When you're done plowing, lights and power pack come off with the plow.

1. Drive truck forks into plow receiver.
2. Pull locking lever & raise stand.
3. Plug-in 2 connections, & you're ready to roll!

Provide complete snow and ice control with a Hiniker Salt & Sand Spreader. It's completely self-contained for quick & easy installation. Engine & hydraulic powered units available.

HINIKER
SNOW PLOWS



USE READER SERVICE #34

Getting lots of really good new customers is a pain in the you-know-what, but...

Even The World's Greatest, Most Reliable, Most Attentive To Detail, Hardest Working Gardener, Lawn & Garden Service Owner or Landscape Contractor Will Starve To Death—Without A Steady Flow Of New Customers!

"I started with a lawn mower and built a million-dollar-plus, highly profitable, and highly respected landscape contracting business at a rapid pace—because of my Customer Attraction Secrets...now, my Free Report reveals my secrets, to those who qualify."

Dayton, Ohio- Are you frustrated by advertising that never makes the phone ring? By being beat out of good jobs by cheap bidders? Feeling like you're starting your business all over again every season? Stuck at a certain level?

A million dollar per year "entrepreneur of the year" says that most of his peers' and competitors' marketing is anemic, me-too-istic, dull, full of costly waste, and ineffective. Arrogant? Egotistical? Marty Grunder says: "React to me any way you like—but one thing is for sure, if you are in the landscaping business or maintenance business, whether you are small or large, my marketing methods can easily double or triple your business in just one year, provide better customers, help you target and get exactly the kind of business you want, increase profitability and stability, and absolutely mystify and trump your competitors."

Big talk? Yes, it is, but this Grunder wisacre has been showing off—and blowing sceptics away—his entire life. As a freckle-faced, red headed Dennis-the-Menace type kid, he started his business with nothing more than a "push" lawn mower and chutzpah. That little business went to 75 regular customers almost overnight. As a full-time student at the University of Dayton, while his buddies drove to school in old "beater" cars and flipped burgers for pocket money, Marty arrived in his Grunder Landscaping Company truck and, at age 21, did over \$300,000.00 in business. This year he was named Young Entrepreneur of the Year by the Small Business Administration's Midwest Region, in the 1 to 25 employees category. Currently, Marty oversees a staff of 30, 15 trucks, a backhoe, an assortment of other equipment, and a diversified business doing everything from basic residential lawn maintenance to complicated commercial landscaping projects—and, this year, breaking the one million dollar mark in annual sales. He's also investing in land, lecturing from time to time, and working with other landscapers as their "marketing coach."

Million Dollar Marketing Secrets Revealed In A Free Report—If You Qualify!

Grunder DOES have "secrets" for building these types of businesses, too. Here are just a few examples:

1. How to **spark referrals**... how to turn "small accounts" into big business.
2. How to **increase Val-Pak Coupon, direct-mail and Yellow Pages advertising results by 10% to 30%**...make your advertising much more productive and be able to accurately measure its value.

3. The 5 biggest mistakes 95% of the people in this business make when advertising and how to avoid them.
4. **How to stop the "price shopper" in his tracks. How to get good business without being the lowest bidder or offering cheapest price.**



Here's the smart-aleck kid standing next to his first truck. Who'd have guessed he'd quickly create the biggest and best company in southern Ohio, confound established, entrenched competitors, and break the million dollar annual sales mark? Betcha he has a marketing secret or two in his pocket that you'd love to steal, if you could!

5. How to avoid the **fatal mistake** of confusing 'marketing' with 'selling'.
6. **Forget wasteful "name recognition" or "getting your name out there"**—learn to "target," create and deliver a "market-matched" message, and **attract exactly the type and size of clients you really want**.
7. Why your "service" should never be the #1 focus of your marketing.
8. Powerful but simple letters and things to say to existent customers to cause demand for a variety of additional, highly profitable services.
9. The "secret" borrowed from the fad-diet business that sells high-priced, high-profit landscaping work like crazy.
10. How to get people working for you and with you to really contribute like a championship team!
11. How to use "automated, autopilot marketing" to bring in new business without you or anyone else even talking with prospects on the phone!
12. Even "poor boy" dirt cheap marketing strategies, like what to write on a simple postcard to bring in a flood of new customers.

13. The "4-Page" marketing tool used 6 to 10x a year that is **guaranteed to increase your business by at least 30% year after year...automatically!**

14. How to position yourself as a "famous expert" in your area, get a ton of free advertising and "fry" the competition.

And there's a whole lot more. At the urging of a big-time, nationally respected direct marketing consultant and professional speaker who discovered and was "blown away" by everything Marty was doing, Marty prepared an easy-to-read but very complete, provocative Special Report—"How To Re-Invent Your Lawn-Garden/Landscaping Business With Million Dollar Marketing Secrets"—and you may be able to obtain a copy at absolutely no cost whatsoever.

Who Should Get Marty Grunder's Special Report?

Marty asks that you call for his free Report ONLY if: (1) you own your own business or are the President, CEO, manager or marketing manager for the business; (2) you make the decisions about advertising, marketing, and customer service investments; (3) you are currently unhappy with some aspect(s) of your business; (4) you recognize that in today's competitive environment, just "doing a great job" isn't enough to sustain a business; and (5) you are willing to make progressive innovative changes in your business if convinced, even reasonably assured that doing so will dramatically improve sales, profits, customer satisfaction, referrals, growth, and community prominence. (Please do NOT waste your time or Marty's money getting this Special Report if you are close-minded, change resistance, fully satisfied with your income, or just a curiosity-seeker without sincere interest in changing your business for the better.)

How To Get Your Free Report:

Simply write "Report" on your business card or a sheet of your letterhead and FAX it to 513-847-8067 or, for even more information and to get your Report, call 1-800-399-7135, listen to a brief free recorded message, then leave your name, company name, and address as instructed. You can FAX or call anytime, 24 hours a day, 7 days a week. If you prefer having your report sent confidentially to your home address, just let us know. Incidentally, requesting your free Report does not obligate you in any way; no salesperson will call to follow-up, nothing of the sort. However, this is a limited free offer, so please take care of it right now, while it's fresh in your mind.

©1995 M. Grunder

SOFTDESK PRO LANDSCAPE

SHOW AND SELL!

No previous drawing experience required. Softdesk Pro Landscape makes it easy to create professional presentations for both residential and commercial customers.



This photorealistic "After" image was created entirely from the "Before" photograph using Pro Landscape.

4 Programs 1 Package:

ONE.

Photoscape technology includes hundreds of plant and other landscaping materials to create realistic photo-view plans.

TWO.

Easy-to-use professional tools simplify creating a detailed plan-view drawing of your Photoscape image.

THREE.

Estimating module automatically includes all plants and materials used in your Photoscape image and plan-view drawing.

FOUR.

Softdesk landscape marketing tools show you how to use new technology to build your business by closing more sales faster.

USE READER SERVICE #35

software series — part 2

(continued from page 40)

can be rated in man-hours so you know precisely what you're charging for jobs and which jobs are producing the most for your business," he commented. "As a manager, this tells you who is your most efficient employee or crew and helps you distribute your payroll more accordingly so you don't lose your good people."

TAKING THE PLUNGE. Extensive research will be necessary to find the best system for your business, and cutting corners can lead to wasted time and money. "Hardware should always be purchased after a consultant examines your software needs," Skuopacki instructed.

But Huston warned contractors to thoroughly examine any software before making a purchase. "Estimating establishes the key standards by which you run a business," he said, "and if you have a flaw there, it's going to filter down through your business."

Tucker recommended contractors focus on technical support offered by vendors instead of shopping for the lowest price. "Contractors understand that good equipment costs money," he said. "The biggest things to customers are technical support and education."

Vander Kooi agreed too many contractors reject the idea of computerizing their finances because of the initial cost of setting up a system. "About 80 percent of contractors do less than \$500,000 in sales a year, so they're not too excited to spend a lot of money on technology," he explained. "But they're not thinking about how much money it can save them."

Interested contractors should be ready to commit fully to integrating the system with their operations for it to be a success. "Using this software isn't easy," admitted Gary Thornton, president of Thornton Computer Management Systems, Maineville, Ohio. "It requires looking closely at your business, and in doing that, you'll find things that need to be changed. That becomes part of the computerization."

Van Zelst took the plunge and went through a painful learning process. "It was definitely tough to learn and get going, but we had reached the point where I couldn't keep track of anything with the old style of accounting," he remembered.

Now computers are an integral part of his business. "We just made a large investment in our office, and one priority was to make sure the proper networking was in place to accept upcoming advancements in technology. We're committed to it."

'Every time bills get out on time, it will improve cash flow and make the company's image more professional.'

This is the second in a three-part series on software for the landscape industry. Next month's article will focus on management software.

The author is Assistant Editor of Lawn & Landscape magazine.

No Room For Error

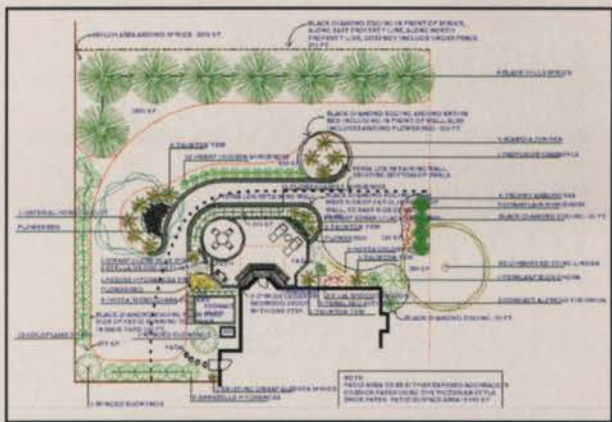
A LANDSCAPE CONTRACTOR'S business starts with the estimates generated for bidding purposes. They set the entire operation in motion and go a long way to determining profitability. "Estimating establishes the key standards by which contractors run the company, and if you have a flaw in an estimate, it's going to filter down throughout the business and cause problems," noted Jim Huston, president of Smith Huston Inc., Orange, Calif., an industry consulting firm.

Most accounting software packages automate the estimating process, and Huston said this can make a major difference in a contractor's year-end profits. Here are 18 benefits of using computerized job estimating, according to Huston:

- Increases accuracy and consistency.
- Increases your ability to control the bidding process.
- Increases confidence (yours and your clients').
- Increases bid volume per bidding labor hour (up to 100 percent increase).
- Decreases overhead per field-labor hour (20 percent to 30 percent).
- Increases your ability to plan and run jobs.
- Provides data for job costing.
- Can be used as a sales tool.
- Provides a packaged system for teaching other employees how to bid.
- Eliminates errors in arithmetic.
- Thoroughly analyzes job prices.
- Produces unit and lump sum prices simultaneously.
- Familiarizes your employees with computers (and the computer's other applications with your company).
- Clearly defines quality standards.
- Produces tools for quick analysis and review of bids.
- Permits large amounts of data to be manipulated accurately by means of task data libraries.
- Excites/motivates your people by improving their professional skill level.
- Increases bidding flexibility and versatility.

FREE CD-ROM Test-Drive!

Experience the ease with which you'll create colorful, professional client presentations.



Pro Landscape Greenhouse feature automatically lists all materials used in your Photoscape and matches them with 2-D symbols for placement in your CAD plan view.



The Greenhouse feature also links everything included in your design to the comprehensive estimating module.

 SOFTDESK

PRO LANDSCAPE

Order Pro Landscape today or to request your Free CD-ROM Test Drive, call us toll-free.

800-231-8574

Contact us via e-mail at
pro@softdesk.com

© 1996 Softdesk, Inc., all rights reserved. The Softdesk logo and Softdesk are registered trademarks; Pro Landscape and Photoscape are trademarks of Softdesk, Inc. registered in the U.S. and other jurisdictions; all other marks are the property of their respective owners.

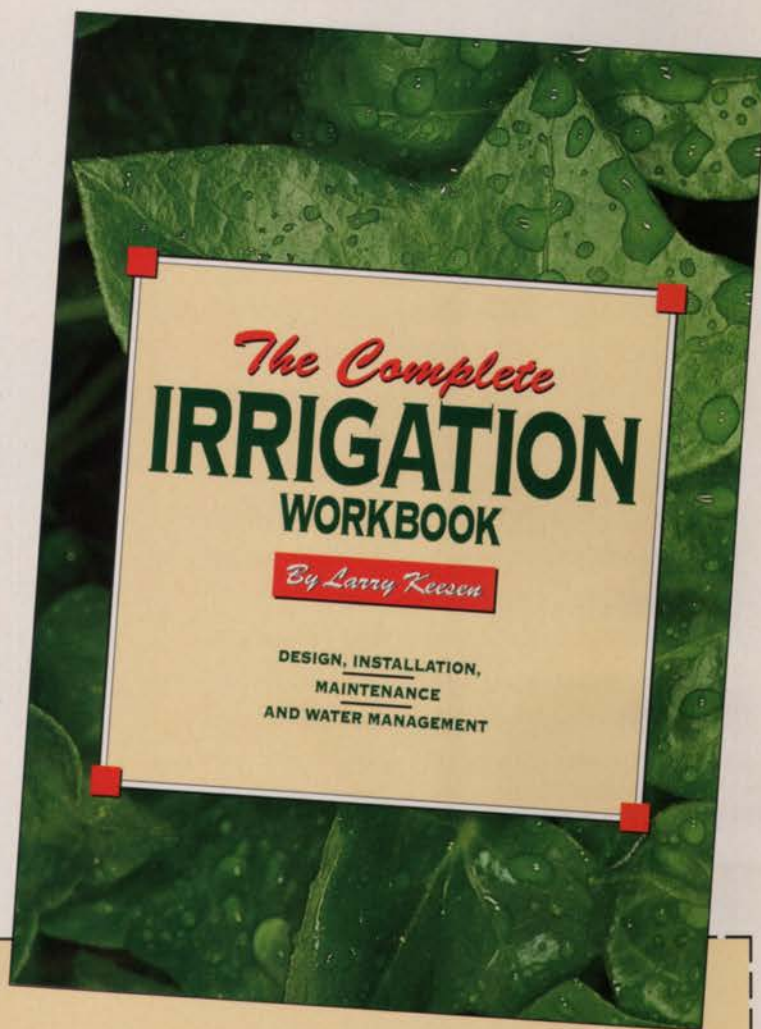
USE READER SERVICE #36

ANNOUNCING...

THE COMPLETE IRRIGATION WORKBOOK: DESIGN, INSTALLATION, MAINTENANCE AND WATER MANAGEMENT.

BY LARRY KEESEN

**NOW
AVAILABLE
for
Immediate
Delivery!**



ORDER TODAY!

☐ YES, I'm interested in purchasing _____ copy(s) of **The Complete Irrigation Workbook** for only \$24 per copy plus \$2.50 shipping/handling per copy. I understand my purchase will be shipped upon payment. I also understand that I can return my book(s) within 15 days for 100 percent refund if I am not totally satisfied.

Please charge to my: ☐ VISA ☐ Mastercard

Card # _____

Expiration Date _____

Signature _____

Return full payment to *Lawn & Landscape* magazine Books Department, 4012 Bridge Avenue, Cleveland, OH 44113. If using your VISA or MASTERCARD, you may fax your order to 216/961-0364. Ohio residents only add 7 percent sales tax. Add \$2.50 for shipping and handling. Allow 4 to 6 weeks for delivery. Quantity discounts are available. To order, call Fran Franzak at 800/456-0707. Published by *Lawn & Landscape* magazine.

Name _____

Company Name _____

Address _____

City _____ State _____ Zip _____

Phone _____

A PEEK INSIDE THE IRRIGATION WORKBOOK

Profitable Bidding
Sensible Sensors
Diagnosing System Ills
Appraising Irrigation Systems
Irrigation Designs
Understanding Pressure
Head Selection & Placement
Zoning and Routing
System Hydraulics
Irrigation Installation

THE COMPOSTING COUNCIL'S SEVENTH ANNUAL CONFERENCE

This year's conference, **MAPPING THE FUTURE**, will guide industry leaders through uncharted territory in compost processing, marketing, and innovation. The conference offers attendees a variety of engaging and interactive sessions as well as the opportunity to meet other industry leaders and exchange new ideas and valuable success stories.



PROGRESS REPORTS

will be presented on Terrestrial Research Project, Water Hyacinth Compostability Project, and various USEPA and USDA research programs. Several topics will be discussed in full panel sessions followed

EXHIBITS AND POSTER SESSIONS

will play a more prominent role this year, as research and product information will be displayed throughout the three-day conference. Academics and government officials qualify for the member discount. Registration after October 15 will incur a \$75 surcharge. Cancellation after that date will be subject to a \$75 fee. Call the Sheraton National Hotel at 1-800-468-9090 for hotel reservations.

SEVENTH ANNUAL CONFERENCE

NOVEMBER 13-15, 1996

Complete registration form and mail with payment or fax with credit card number to:

THE COMPOSTING COUNCIL
114 South Pitt Street, Alexandria, VA 22314
Phone (703) 739-2401
Fax (703) 739-2407
E-mail comcouncil@aol.com

Name _____
Organization _____
Address _____
City _____
State, Zip _____
Country _____
Telephone _____ Fax Number _____
E-mail _____

Conference Fees

- ☐ Member-\$360
☐ Nonmember-\$425

☐ Check enclosed

☐ Please bill my:

☐ MC ☐ Visa ☐ Amex

Cardholder's Name _____

Card Number _____

Expiration Date _____

Cardholder's Signature _____

Please make hotel reservations directly with the Sheraton National Hotel, (800) 468-9090.

Hotel rates: \$115 single \$130 double
\$103 govt. single \$119 govt. double

SHERATON NATIONAL HOTEL—ARLINGTON, VA
USE READER SERVICE #39

Rescuing Healthy Soils

Accidents do happen and roadside salt, spilled oil or product misapplications can change a healthy soil into an unhealthy mix. Quick action often is necessary.

By C. Neal Howell



Have you ever dealt with problems like salt damage and accidental petroleum spills? Ever had a hydraulic hose burst right in the front yard of a half-million dollar home? Although you and your employees may have never used the wrong herbicide, you may someday need to know how to correct that problem, too. How about a yard that just refuses to green up? What about fertility problems — can you overdo a good thing?

These circumstances can cause real soil problems, but they don't have to be perpetual problems. Understanding the problem will help you determine the correct solution.

FIGHTING SALT DAMAGE. Tree lawns take a lot of abuse in summer heat when cars' dump exhaust fumes on already stressed turf. When winter comes, a real tragedy occurs. As the salt trucks spread salt and other chemicals on the streets, the materials are thrown up onto the tree lawns. Plows come down the street to push off the snow and slush laden with salt residue, which also ends up on the tree lawn. As the weather warms, the water carries the salt right into tree lawn turf.

Salt damage usually results in reduced root and shoot growth in turf, an increased tendency to wilt, leaf tip burn, as well as white deposits on the soil surface.

A secondary problem occurs as salt causes the soil structure to break down, resulting in severe compaction, which prevents water and air from reaching plant roots. Overall, turf plants lose vigor and are generally replaced with more aggressively growing weeds.

Depending on the severity of the damage, there are several ways to correct these problems. First, a heavy aeration followed by several deep irrigations may flush the salt and chemicals out of the root zone. Next, an application of a wetting agent along with deep irrigation may help move the sodium out of harm's way.

If those steps are not sufficient, an application of sulfur or gypsum may be needed to chemically displace the sodium ions. Irrigate to move the sulfur or gypsum into the soil profile. Allow seven to 10 days for the

(continued on page 48)



Salt damage caused by ice melting chemicals may reduce turf growth, burn the leaf tips and leave white deposits on the soil. Salt may also break down the soil structure, causing severe compaction.

Turf-Seed suggests you plan ahead the next time you

Seed or Renovate

- Plan to save time • Plan to save on fertilizer applications
- Plan to make you and your customer look better
- Plan to reduce stress and fatigue of personnel
- Plan to save wear and tear on equipment
- Plan on less clipping removal *with these Turf-Seed products:*



Perennial Ryegrass

Alliance Brand Blend

- Contains BrightStar for less clipping removal and darker color with less fertilizer

Tall Fescue

MowLess Brand Blend

- Contains lower-growing varieties for fewer mowings and/or less clippings

Kentucky Bluegrass

Midnight and Challenger

- Extremely dark color with exceptional performance in NTEP Trials

Fine Fescues

Discovery and Shademaster II

- Shade tolerant, extremely low maintenance

Wildflower Mixtures

Bloomers® and DeBlooms

- Add color to unimproved development areas

Call Turf-Seed today for a distributor near you!

Produced and
Marketed by:



TURF-SEED, INC. / PO Box 250, Hubbard, OR 97032 / 800-247-6910 / 503-651-2130 / FAX 503-651-2351

(continued from page 46)

reaction and then irrigate heavily to flush the impurities out of the root zone. In some cases, you may need to reseed. In extreme cases, new sod may be the only viable solution, but make sure it is installed after the accumulated salts have been removed.

HANDLING OIL SPILLS. Prevention should be the first rule with oil spills. Never, never add fuel or oil to a piece of equipment while on turf or other growing plants. Always service equipment where a spill can be cleaned up with a minimum of fuss and damage.

Despite all these good intentions, what

happens if you spill some type of petroleum product on the soil or if a hose bursts and oil or gasoline runs into the soil?

Symptoms of petroleum injury are a general browning of the turf with a shiny, water soaked appearance and the smell of oil. Plant leaves start to roll. Damage is usually confined to a specific area.

For small areas, sprinkle immediately with either a powdered detergent or a liquid dish soap. Rinse plants with a strong stream of water to break down the petroleum product and use a wet/dry vacuum to remove any suds that may form.

DAWN



- CHEMICAL INJECTION
DIRECT, ACCURATE
& DEPENDABLE
(0% - 10%)
- TRIPLE SPILLAGE
CONTAINMENT OF
CONCENTRATES
- ALL FIBERGLASS
FULL ENCLOSURE

TUFLEX FEATURES INJECTO-MATIC CHEMICAL INJECTOR SYSTEMS

- 600 GALLON SEAMLESS FIBERGLASS TANK
- DUAL REELS (TURF/TREE SHRUB)
- TIP-N-POUR CONTAINMENT
- TOOL RACKS
- HANDWASH PORT
- BACK PACK/HAND CAN RACK
- FERT SPREADER MOUNT
- STEP-DOWN REAR ENTRY
- DRY PRODUCT STORAGE
- EXTERNAL TANK FILL PORT
- TANK MIX SYSTEMS WITH AUXILIARY PUMPS & ENGINE ALSO AVAILABLE

Tuflex®
MANUFACTURING CO

Experience Tomorrow TODAY.
(800) 327-9005 (954) 785-6402
TUFLEX123@AOL.COM

Fertilizer: A Little Goes a Long Way

THE 16 ESSENTIAL nutrients must be present in the proper proportions to allow normal growth. If any one element is omitted or not supplied in sufficient amounts, growth will be curtailed.

Nitrogen is the element required in the largest quantities by turfgrass. Dark green color increases as the amount of available nitrogen increases — up to a point.

As available carbohydrate reserves are consumed, high rates of nitrogen can actually cause death of the plants' root systems since the plant needs new carbohydrates for its new shoots. Increased nitrogen rates can also increase plant damage due to water stress or drought. The tendency of plants to wilt or dry out in winter can also be caused by nitrogen levels that are too high.

Overapplications of nitrogen are difficult to correct. Heavy irrigation, along with applications of balancing phosphorus, potash and micronutrients can help ensure that carbohydrate levels do not drop to the danger point.

If immediate corrective action cannot be taken, the turf and soil may have to be removed and replaced.

For areas that may have been marginally affected, use normal cultural practices and give the areas extra attention to diagnose and correct future problems.

Unfortunately, it's not the petroleum product that actually kills the turf, but the high temperature of the oil as it spills from the hydraulic hose. The turf is usually dead within minutes of being hit with hot oil. In these cases, replacement may be the only viable alternative.

ong Way

Phosphorus is used in smaller amounts than nitrogen and is seldom a problem unless repeated application of high P fertilizers are made year after year. Elevated phosphorus levels can tie up micronutrients like iron and form insoluble compounds. Correct for overapplication by repeated applications of an acidic iron. Phosphorus is seldom lost by leaching, so irrigation wouldn't help.

Potash helps increase drought tolerance, rooting, heat and cold hardiness, disease resistance and wear tolerance. It is seldom used in excess amounts, but it is readily leached by irrigation and rainfall.

Micronutrients can be applied to excess and because of plants' minimal requirements, exercise care, especially with boron. Research has shown that turf is capable of doing very well with higher levels of iron, zinc, manganese and copper. High rates of iron and manganese continue to be used with little or no detrimental visible effects. Always use care and follow label rates for micronutrients.

MISAPPLICATION BLUES. What about chemical spills and misapplications? Depending on the product, the application rate, the time and the method of application, solutions are varied. In descending order of effectiveness, they include: activated charcoal, aeration plus heavy irrigation, heavy irrigation alone,

incantation and burnt offerings.

With some chemicals, a quick application of water may help wash off the leaves' surfaces before it has time to work. For products absorbed through the leaves like some herbicides, you may only have a few minutes to try this method. For soil-applied

ANSWER: DINGO DIGGING SYSTEM



QUESTION:
*What helps you
save time, labor
costs AND will
be the best employee you ever had!*

POWERFUL – 2 pump, 3000 psi hydraulic system delivers incredible power!

MANEUVERABLE – goes where other skid steer loaders can't.

VERSATILE – over 30 attachments to choose from — trencher, backhoe, auger, cultivator, tree spade, forklift, angle blade, rotary broom, and more!

COMPACT – haul the entire system to the jobsite on one 12' trailer!

DINGO

DIGGING SYSTEMS

3326 Hwy. 51
Fort Mill, SC 29715
Office 800 476 9673 Fax 803 548 2762

Dingo ... the system for success!

LET YOUR MOWER DO ALL THE WORK!



patents pending

Shipping included. Limited time only.

1-800-327-5044

Kenco Corp. introduces the "BARREL CADDY"

Designed by a commercial landscaper. Assures proven savings & productivity.

GUARANTEED-OR MONEY BACK

Time is money - The **"BARREL CADDY"** saves the average landscaper approximately 1 hr/day. No more physically transporting grass catchers and heavy dumping barrels to and from the truck. Mount the **"BARREL CADDY"** to any commercial walk behind mower and let it transport excess grass clippings.

- HEAVY DUTY STEEL CAGE CONSTRUCTION
- HEAVY DUTY PLASTIC RECEPTACLE BIN
- FIT KITS AVAILABLE FOR EVERY WALK BEHIND
- EASY RUBBER LATCH REMOVAL
- MUFFLER KITS AVAILABLE FOR FRONT EXHAUST MOWERS

Order Now!



Dealers Welcome \$179.95

USE READER SERVICE #46

Progressive Electronics
Model 521

WIRE & VALVE LOCATER

- Find Lost Solenoid Valves
- Locate Wire Path And Depth



save 10%

All The Equipment You Need To Troubleshoot Irrigation Systems

\$585.00

(REG. PR. \$650.00)

e-mail lnghrn1069@aol-com

1-800-284-0205

Irrigation & Landscape Supplies • Dallas, TX

USE READER SERVICE #45



A world of difference— SLICE

Different because the SLICE computer systems were designed exclusively for the green industry, offering comprehensive solutions that fit your business.

Different because SLICE is at work today in nearly 200 green industry businesses in over 30 states and Canada.

Call today for a larger SLICE of tomorrow's business.



SLICE

Thornton Computer Management Systems

424 East U.S. 22 Maineville, Ohio 45039

513-683-8100

National (800) 543-7249

Ohio (800) 582-6129



USE READER SERVICE #44

soil basics — part 2

herbicides, the activated charcoal remedy may be the best alternative.

Activated charcoal works by absorbing the chemicals with which it comes in contact. Finely ground activated charcoal is best. Charcoal works on some chemicals but is ineffective with others. Be sure to consult the label and understand that some damage is difficult to undo. Always follow label instructions.

NOT GREENING UP. Have you ever applied the "right" fertilizers and still had complaints from customers about poor color? Did you check the soil pH?

In many areas of the country, a high soil pH will frustrate even your best efforts to make it green. A soil pH of 8.0 or higher can deactivate most of the micronutrients needed

.....

*On problem lawns,
a portable pH meter
can give you needed
information in a few
minutes for a few
pennies per test.*

.....

for quality plant growth and can prevent the plant from producing chlorophyll to give the desired green color.

There are conditions where a low soil pH, which should enhance micronutrient pickup (especially iron), has created a pronounced iron deficiency. As the soil pH drops below 7.0, micronutrients tend to become more available to plants. Unfortunately, if some micros like zinc, copper or aluminum are present in greater amounts than needed, they will become extremely attractive to plants as the pH drops. These micros will be preferentially absorbed to the exclusion of iron, causing iron deficiency.

On problem lawns, a portable pH meter can give you needed information in a few minutes for a few pennies per test. Once an out-of-kilter soil pH is identified, you have

Limestone Levels for Acidic Soil

Approximate amount of finely ground limestone required to correct soil acidity
(expressed in pounds per 1,000 square feet)

SOIL PH	FESCUES	BLUE, BERMUDA AND RYEGRASS			
	SANDS & SANDY LOAMS	LOAMS & CLAYS	SANDS & SANDY LOAMS	LOAMS & CLAYS	
6.3-7.0	0	0	0	0	
5.8-6.2	0	0	25	35	
5.3-5.7	25	35	50	75	
4.8-5.2	50	75	75	100	
4.0-4.7	75	100	100	100	

Table 1.

an excellent opportunity to offer add-on applications to set things right.

If the soil pH is low (4.5 to 6.0), apply finely ground limestone to raise the pH to an optimum level of 6.5. In areas which are deficient in magnesium in addition to having a low soil pH, use dolomitic limestone. It contains magnesium as well as calcium.

Gypsum, which also contains calcium and magnesium, will not appreciably affect soil pH and should not be used to raise pH.


Applications of lime should be made during the late fall, winter or early spring. For northern regions, early winter or late fall are good application times. Water in the applications for success.

Soil with a high pH can severely limit

micronutrient uptake and also reduce the effectiveness of nitrogen fertilizers. On soils that are only moderately alkaline (7.4 to 8.5), elemental sulfur can quickly correct the soil pH. Exercise care when applying soil sulfur. Limit application rates to five pounds or less per 1,000 square feet per application. Sulfur applications should not be made during the heat of summer when turf is suffering from moisture stress.

Don't overdo a sulfur application, but make an application, wait several days and allow the irrigation or rainfall to wash the sulfur into the soil before making another application.

Check soil pH between applications. Correcting the soil pH will do wonders toward achieving the degree of turf color your customer desires.

Applying liquid iron products by foliar spray can sometimes correct color problems prior to achieving optimal soil pH. On soils with high amounts of free calcium and a high soil pH, a soil application of sulfur will sometimes allow foliar micronutrient sprays to work better when they're applied. 

The author is an industry consultant with Key Solutions, a division of Iris Sales & Solutions Inc., Rocky River, Ohio.

Sulfur Specs

Approximate amounts of elemental sulfur (95%) required
to lower soil pH to 6.0-6.5 (in pounds per 1,000 square feet)

ORIGINAL SOIL PH	LOAM SOILS	SANDY SOILS	CLAY SOILS
7.5	18	12	23
8.0	34	28	46
8.5	57	46	69

Table 2.

A NEW DIRECTION IN FERTILIZER

ALL ESSENTIAL NUTRIENTS &
BIOLOGICALS IN ONE GRANULAR APPLICATION

14-3-6 1% IRON • 6-2-12 3% IRON

800 343-6343

EXCELLENT
SUMMER
FERTILIZER

HARMONY

Nature

COMPLETE

USE READER SERVICE #47

What's All the Noise About?



Manufacturers emphasize the importance of proper operator technique when using blowers so the units can be operated efficiently at less than full throttle on occasion. Credit: Little Wonder

Blower and vacuum manufacturers have put most design issues on the back burner and focused all of their attention on noise emission issues.

By Bob West

Protests by environmental activists and community groups across the country are forcing manufacturers to focus current design efforts on building quieter products. Legislators in Los Angeles are now considering an ordinance to ban gas-powered backpack blowers within 500 feet of a residence. Contractors, however, continue to call for products with more power, leaving manufacturers in a bind.

"The reason (for the protests) is relatively easy to explain," noted Robin Pendergrast of International Marketing Exchange, McHenry, Ill. Pendergrast is a spokesman for Echo Inc., Lake Zurich, Ill. "Blower noise is part of a bigger environmental picture. Growing population centers generate more noise than ever. There's more air pollution today, or at least more concern about it — not to mention closing landfills, recycling and other green-related issues. Add to this more new homes — with lawns and landscapes and professional users to keep them clean — and the stage is set for blower restrictions."

QUIT YOUR WHINING. Making a quieter blower or vacuum isn't just a matter of muffling exhaust noise. It also deals with controlling the type of noise created.

"The noise levels produced are not super high now," commented Pete Fernald, technical services manager, Shindaiwa Inc., Tualatin, Ore. "but it's the high pitched whine that needs to be controlled."

"It's tough for manufacturers," noted Gary Hardee, manager of power tools at Stihl Inc., Virginia Beach, Va. "Users want high performance, but if people start restricting air flow they're also restricting productivity. So there is definitely room for some entrepreneur to come up with a better impeller design."

Dave Navroth, director of sales for Little Wonder, Southampton, Pa., agreed that the pitch of the sound is a primary concern. "The impeller ripping the air through the housing is the problem," he said. "So we're looking at different fans, housing designs, paint, intakes — the whole works."

Navroth added that limiting noise emissions is less a concern now for walk-behind units. "Walk-behinds are lucky since they're primarily used in the Northeast and most noise issues seem to be out West." Local initiatives certainly aren't relegated west of the Rocky Mountains, however. Governments in Boston, Orlando, St. Louis, Chicago and New York are also considering blower restrictions.

(continued on page 54)



From the University of California!

PESTS of LANDSCAPE TREES and SHRUBS:

An Integrated Pest Management Guide

This up to date and authoritative book on managing landscape pests features **330 color photos** to help you identify **hundreds of insects, mites, weeds, plant diseases, nematodes and other problems that damage trees and shrubs.** Emphasizing an ecologically based IPM strategy, the book suggests design and maintenance practices that prevent pest problems, resistant cultivars, biological control agents, less-toxic pesticides and physical and mechanical controls. **Fifty pages of easy-to-use problem-solving tables list hun-**

dreds of woody landscape plants common throughout North America. 327 pages \$32, shipping and handling \$4.00; \$.50 for each additional copy.

Order publication #3359 LLM, UCANR Publications, 6701 San Pablo Ave., Oakland, CA 94608-1239. With Visa or Mastercard call 800-994-8849 (in Calif. only) or 510-642-2431 or fax 510-643-5470. e-MAIL: anrpubs@ucdavis.edu

REQUEST OUR 1995 CATALOG OF PUBLICATIONS!

USE READER SERVICE #48

Gotta Get A Gator

PORTABLE DRIP IRRIGATION SYSTEM

"These things are very easy to use. During establishment, we've really cut our losses. We used to lose 3-4%. Now we're down to 1%." Jim Smith, Univ. of Illinois-Champaign/Urbana

"A great innovative product and an effective tool for our tree establishment care program." Tim Martz of Wichita, Parks and Rec.

• Reduce watering frequency by 50% and time spent by 80-90%

• Reduce Transplant Shock

• Reduce Water Quantity Usage



TREGATOR®
1-800-800-7391

Visit our web site at: <http://members.aol.com/spectrumnc/gator>

USE READER SERVICE #49

Our Buildings Are A Cut Above



Lester pre-engineered building systems are designed around your needs for an attractive, affordable and energy efficient structure. Quality components plus the industry's leading warranty provide long term satisfaction! Call today for more information.

- Equipment Storage •
- Offices • Retail •



LESTER BUILDING SYSTEMS
A Division of Butler Manufacturing

1-800-826-4439

USE READER SERVICE #50

NEW 1996 TERRA-RIDER, RIDING AERATOR

This aerator is so simple and easy to operate that there is no need to be an experienced operator. You can insert more holes per acre and do more acreage in a day than with any other walk behind aerator.



Features include:

- 22" aerating width and 98 tines do one acre per hour.
- 8HP electric start Briggs & Stratton engine.
- Tecumseh foot operated hydrostatic drive.
- Electric screwjack to put tines in the ground and to transport.

TERRACARE PRODUCTS CO., INC.
PO BOX 250 • PARDEEVILLE, WI 53954
(608) 429-3402 • FAX (608) 429-2889

USE READER SERVICE #51

LAWN & LANDSCAPE • SEPTEMBER 1996

53

(continued from page 52)

Heather Geddings, marketing coordinator for Husqvarna Forest & Garden Co., Charlotte, N.C., said along with addressing noise emission issues, her company relocated the throttle handle to the hose from the backpack itself so it's more accessible for the user. "We also improved the perfor-

mance of the bag when the unit is used as a vacuum," Geddings added. "So that's been entirely redesigned as a larger bag with a new dust liner to not let particles through."

The growing competitiveness of the blower market lead Encore Mfg., Beatrice, Neb., to decide to quit manufacturing blowers and leave the market all together. "This

is such a tough market to be in," explained Dick Tegtmeier, president. "It's expensive equipment to produce, and we couldn't reach the numbers we needed to make it."

PRODUCTIVE DESIGNS. While many contractors consider autumn's falling leaves a plague because they can slow down mowing jobs, more contractors are embracing this fall cleanup for a potential add-on service.

"The leaf blower market today is moving in a good direction," remarked Tony Janiak, vice president and general manager of Giant-Vac Mfg., South Windham, Conn. "I see a lot of contractors moving from backpack blowers to walk-behind models because they're fighting to keep the bids reasonable while labor costs increase. So they're looking for machines to do the job more efficiently."

Janiak said the real value of walk-behind units is the horsepower, ideal for clearing entire properties. "The walk-behinds with 8 to 16 hp are becoming more popular because of the volume of air they move and the time they can save on larger jobs."

Manufacturers are also working to make walk-behind units versatile enough to vacuum, chip and blow or bag materials at the same time. "Contractors want a machine to gather and shred clippings on site so they can move on without having to stop to dump clippings," stated Tim Gilbert, marketing director, Patriot Co., Milwaukee, Wis.

COMMON SENSE CONTROL. The future of blowers is more uncertain than any other landscaping tool. Manufacturers emphasize, though, the important role contractors can play in controlling the fervor against this indispensable tool. "Contractors should be responsible when establishing the parameters for doing the job, while the manufacturers need to do their engineer-

Nothing works harder than a Steiner.



Terra Rake



Power Blower



Slip Scoop



Lawn Sweeper



Rotary Mower
Mulching/Rear Discharge



Slump Cutter



Power Angle Blade



Model 420 with Chipper/Shredder

Why buy up to 18 single-purpose lawn maintenance machines when you can have one Steiner? In minutes, Quick-Hitch attachments turn our uniquely engineered turf tractor into a chipper/shredder, snowblower, earth-mover, blower, edger — you name it.

The multi-talented Steiner 420 is so versatile, it's easy to forget that it's one of the finest lawn mowers you can buy. One turn behind the wheel will tell you that nothing else moves like a Steiner. Constant four wheel drive and a fully articulated frame allow you to tightly maneuver around obstacles, while the floating cutting deck follows every crease and curve in the landscape.

Best of all, the Steiner is engineered with pride for years of dependable performance. So, if you're looking for a turf tractor that's equally adept at up to a dozen-and-a-half other yard maintenance chores, there's only one choice. Visit your Steiner dealer today.

STEINER

A turf tractor with a different twist

STEINER TURF EQUIPMENT, INC.

289 N. Kurzen Rd. • P.O. Box 504 • Dalton, OH 44618 • Phone: 330/828-0200

Mfg. in Dalton, OH

Versatility is one key feature of walk-behind blowers and vacuums. Credit: Patriot Co.



Blower Marketplace

The **Echo PB-46LN** backpack blower operates at 64 decibels with a 44-cc, two-stroke engine with electronic ignition.

Circle 231 on reader service card

Husqvarna's 225HBV hand-held blower weighs 11.2 pounds with a 25.4-cc cylinder volume and optional mulching kit.

Circle 232 on reader service card

The **Makita RBL500** backpack blower weighs 19.2 pounds and has a 48.6-cc engine.

Circle 233 on reader service card

Maruyama's BL 400 backpack blower weighs less than 20 pounds and moves 475 cfm of air with a Kawasaki engine.

Circle 234 on reader service card

The **452 MVB** hand-held blower from **Poulan Pro**

has a 32-cc DuraChrome engine for a maximum air velocity of 180 mph.

Circle 235 on reader service card

The **EB480** backpack blower from **Shindaiwa** features a noise rating of 69 decibels with an air volume performance of 415 cfm.

Circle 236 on reader service card

Stihl's BG75 blower/vacuum has a 25.4-cc engine producing an air flow rate of 377 cfm and weighs 9.8 pounds.

Circle 237 on reader service card

The 43-cc engine on the **Tanaka TBL-4600** backpack blower delivers 500 cfm of air volume at speeds up to 200 mph.

Circle 238 on reader service card

The **Toro Lawn Vac** fills a 9-cubic-foot collection bag and is powered by a 5-hp Briggs & Stratton engine.

Circle 239 on reader service card

Trac Vac's Model CV385 vacuum chips, limbs and branches up to 2½ inches thick.

Circle 240 on reader service card

ing homework and get the job done," instructed Pendergrast. "This has to be a joint effort to clean them up and quiet them down."

Janiak added that contractors should be sure to use only the amount of power necessary for each specific job. "Most blowers will do the job at half to three-quarters speed, especially the walk-behinds," he said.

Fernald also indicated some basic technician training can allow them to operate blowers efficiently at less than full throttle. "Technicians should pay attention to direct the air in such a way to move the material instead of blowing down on top of it," he noted.

Manufacturers hope responsible use of blowers and vacuums by contractors will calm some of the fiery protesting and give them time to develop quality machines. "Otherwise, it's the contractors who are going to have to sacrifice," warned Hardee. **ll**

The author is Assistant Editor of Lawn & Landscape magazine.

YOU DIDN'T KNOW WHAT YOU WANTED. SO WE GAVE YOU EVERYTHING.

Now there's one tool that does it all: the **Shindaiwa PowerBroom**. It sweeps, shovels, rakes, mops, scrapes, brushes and more. And it works most anywhere - from the rooftop, golf course or construction site - and on everything from turf and asphalt, to snow, rock, sand and gravel. It's the one tool to have when one tool isn't enough.



- heavy-duty gearcase
- solid-steel splined drive shaft
- TK diaphragm carburetor
- forced-air cooling system
- one-piece ignition
- high-capacity fuel tank
- long-wearing sweeping belts
- 7-day money back guarantee
- for the dealer nearest you call 800-521-7733

WE SIMPLY MAKE THEM BETTER.

shindaiwa

EQUIPMENT NOTEBOOK

ARE YOU READY FOR THE SNOW?

There are few things as threatening to a contractor's business as broken equipment. If the equipment doesn't work, no one's making any money except the competition.

This is especially true for contractors offering snow removal services, when the amount of time for work is limited to when it snows.

A broken plow or a spreader that is out of commission for a few days can cause you to lose valuable time when the first snowfalls come in the winter.

Snow equipment manufacturers emphasize the value of

preventive maintenance, including a thorough inspection and test of all winter equipment well before it is needed.

"All of the equipment should be tested and prepared well before the first storm arrives," recommended Greg Daniels, president of Daniels



Pull Plow, East Dundee, Ill. "Too many contractors wait until the day before it's supposed to snow to get their equipment ready to work."

POWER OF THE PLOW. Each manufacturer may have different tips for plow maintenance,

but they all agree on the importance of it and note that too many contractors don't recognize the need for plow maintenance. "A fresh coat of paint may make the plow look nice," noted Daniels, "but it takes a lot more to get it ready for winter."

Both Daniels and Gary Dwinal, technical service manager for Western Products, Rockland, Maine, had numerous recommendations for properly maintaining snow plows of any style:

- Check oil level and belt alignment for the oil pump.

(continued on page 58)

sure-loc



Factory Direct Savings

- *Low lifetime cost
- *Resists frost heaving
- *Same day shipping
- *Mill, black or green anodized

We also offer a complete line of:

- *Steel Edging
- *Aluminum Paver Restraints

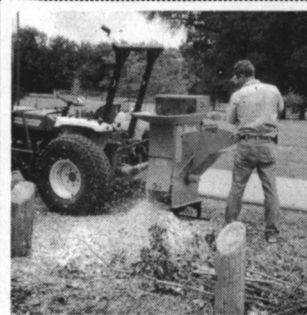
Let us quote your next project!
Call today for a free color brochure

1-800-787-3562

Fax 616-392-6015 A5482 - 144th Avenue Holland, MI 49423

USE READER SERVICE #54

PERFORMANCE



Performance is the best one word description of the Goossen Chipper/Shredder.

Whether chipping 5" diameter limbs or shredding smaller branches and leaves the results are the same... a beautiful decorative mulch. An optional blower and leaf vacuum attachment make loading processed material a breeze.

PERFORMANCE PLUS



Goossen INDUSTRIES

For details on this and other fine Goossen Products: Call Toll-Free 1-800-228-6542
In Nebraska: 402-228-4226
Fax: 402-223-2245

Six models to choose from:

- CS1000 PTO
 - Three point
 - 540 PTO
- CS5000 Gas Powered
 - 13 hp Honda
 - non-highway towable
- CS5100 Gas Powered
 - 13 hp Honda
 - Torsion Axle allows highway towing
- CS 5500 Gas Powered
 - 13 hp Honda engine
 - Skid mount trailer
- CS 6000 Gas Powered
 - 18 hp Honda engine
 - Torsion Axle
- CS6500 Gas Powered
 - 18 hp Honda Engine
 - Skid mount trailer

USE READER SERVICE #55

SOFTWARE MILLIE for WINDOWS!

- Accounts Receivable
- Accounts Payable
- Payroll
- Inventory
- Equipment Maintenance
- Weather Tracking
- Complete Plant List
- Unlimited Customers

Available this Fall!
DOS Version Available Now!
1-800-262-9498

USE READER SERVICE #57



**EVERYTHING FOR THE
LAWN MAINTENANCE INDUSTRY**
CELEBRATING OUR 30th YEAR!



200 gal. poly baffled tank unit

Call us for
fall/winter
specials.

- 200 gal. poly baffled tank
- 5.5 Honda with D-30
- Electric reel

- 300 ft. 1/2" hose
- Unit pre-tested & ready to use
- Custom built units available

**OLDHAM CHEMICALS
COMPANY, INCORPORATED**
COMPLETE SUPPLIER OF T & O CHEMICALS

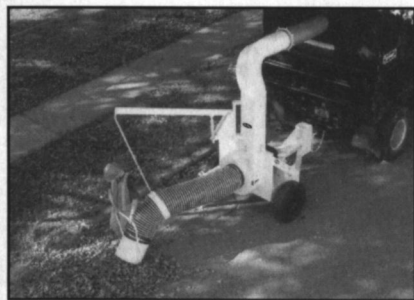
1-800-888-5502

Or write: P.O. Box 18358, MEMPHIS, TN 38118

USE READER SERVICE #59

Turn ON your OFF season!

with Hi-Way's line of Fall, Winter and Spring products.



FALL

Turn fall's mountains of leaves into mountains of money with the axle-mounted **AM-23** and **AM-30** high-volume leaf vacuums. Available in 23 or 30 hp configurations, both include spring-loaded booms and hoses that generate 7,000 (AM-23) and 10,000 (AM-30) cubic feet of suction per minute. (AM-30 shown.)

WINTER

When the deep freeze hits, arm yourself with the **Model P** deicing spreader. Mounted in the back of a standard pickup, the **Model P's** 8.5 hp engine uniformly casts material up to 40 feet and is ideal for spreading salt and sand on parking lots, driveways, cul-de-sacs, and streets.



SPRING

The **AG-18** eliminates winter's left-over leaves and spring's fresh grass clippings with its 18 hp vacuum and 18' in-take hose. The **AG-18** topper, combined with the fully-hydraulic **Dump "E"** dump box, is either installed in a standard pickup or pulled on a trailer. Or, remove the topper to use the **Dump "E"** alone as a dump box for all-season use. Its 6,000 lb. lift capability and triple-action tailgate allows for spreading and hauling a variety of materials.



Highway Equipment Company
616 "D" Ave. N.W. • Cedar Rapids, IA 52405
Phone: 319/ 363-8281 • FAX: 319/ 363-8284

HI-WAY

Building the best since 1939.

Highway Equipment Company manufactures Hi-Way deicing spreaders, road maintenance equipment and leaf vacuum systems.

USE READER SERVICE #56

LAWN & LANDSCAPE • SEPTEMBER 1996

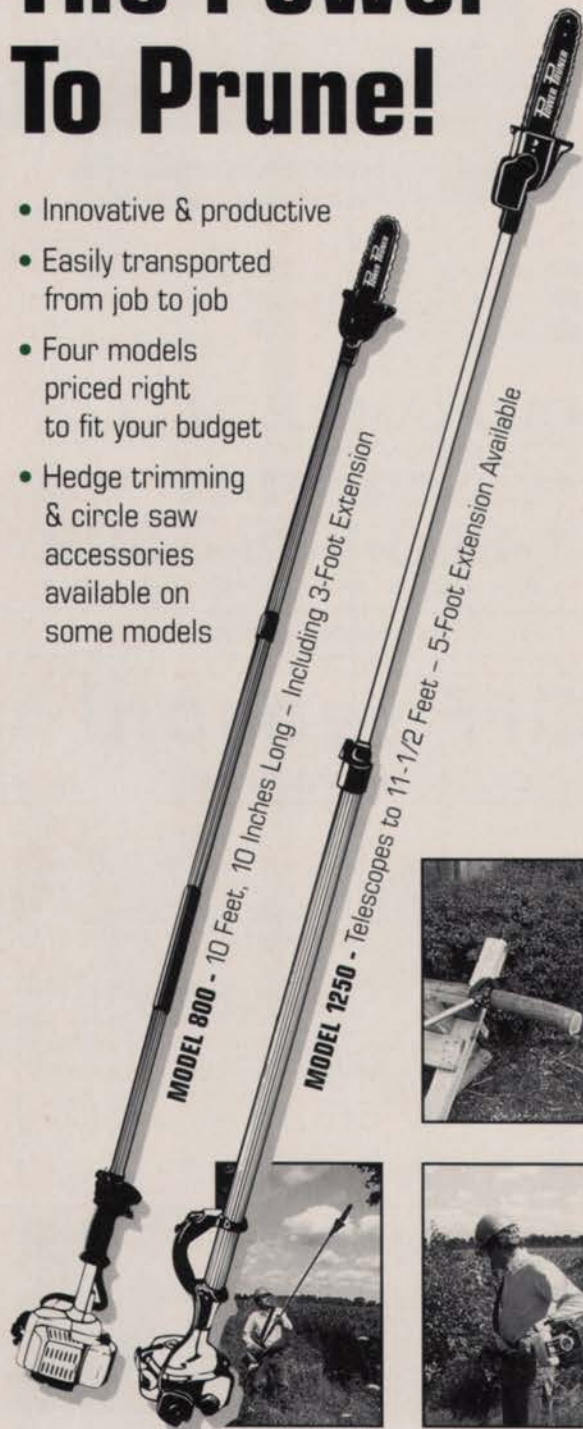
57

POWER PRUNER

REACH NEW HEIGHTS

The Power To Prune!

- Innovative & productive
- Easily transported from job to job
- Four models priced right to fit your budget
- Hedge trimming & circle saw accessories available on some models



Check Out Our Web Site At: <http://www.power-prune.com>

For Dealer Locations Call 1-800-243-9592

TECHNIC TOOL CORPORATION

EQUIPMENT NOTEBOOK

(continued from page 56)

- Check the cutting edge and shoes for wear.
- Check the oil pump pressure and the oil filter in the hydraulics.
- Check the lift chain.
- Check all pins and bolts for tightness.
- Check that all lights work and align them properly.

TEST THE TRUCK. Contractors planning to mount a plow on a truck should also be sure not to ignore the extra weight strain it places on the truck body.

Dwinal also had a list of recommendations for truck maintenance:

• • • • •

Snow equipment manufacturers emphasize preventive maintenance and a thorough examination of winter equipment well before it will be needed.

• • • • •

- Check all lights, tires and fluid levels.
- Check the battery and charging system.
- Place counter balancing weight in the back of the vehicle.

Daniels reminded contractors to check under the truck. "It's important to check the welds to see that they are all good and that the undercarriage



Check all of the wiring, cable connections and bolts, as well as the spreader itself, before using each winter. Credit: Highway Equipment

of the truck hasn't loosened up," he noted. "It's also a must that the U-joints on the front end of the truck be in good condition. If there's any bit of play in them, I would change the U-joints right away, or it will end up costing more in the long run."

SPREADER CHECKS. For truck mounted spreaders, Bill Nero, president of Central Parts Warehouse, Orland Park, Ill., recommends contractors remove and clean all cable connections and sand the terminals if necessary. "They should also use dielectric grease on any plug-in type of connections," he added, "and make sure control box cables are plugged into the ground cable clean and tight."

He offered additional recommendations for preparing spreaders for rough winter use:

- Check all bolts for tightness and wear.
- Install the spreader and test it before the season starts.
- Check the wires along the frame rails to ensure they aren't pinched or melted on the surface of a muffler.
- Make sure the wires are secure. — Bob West

LL



GROTECH spreaders make snow and ice control a real money maker! The Grotech Swing Away TGS 100 Spreader mounts to any pickup and still allows full tailgate access. Remove one hinge pin, swing the spreader out and use the tailgate! Load snowblowers or forklift pallets of salt; it's quick and easy.

Grotech's Swing Away Tailgate Spreader has adjustable rails for most truck widths. The hopper has a low profile, giving the operator rear window visibility.

Weatherproof, corrosion resistant construction throughout, including a fully enclosed 12-volt DC high-torque motor inside a sealed housing. The TGS 100 has a 9-cubic-foot/600-pound capacity for #1 rock salt or equivalent material and spreads from 3 to 35 feet.

Circle 225 on reader service card



The pro's best buy! **ENCORE'S** new Z48 is loaded with features for cutting performance, durability and easy handling. Zero radius turning, excellent stability, smooth ride, easy control, quality construction. This Z has it all!

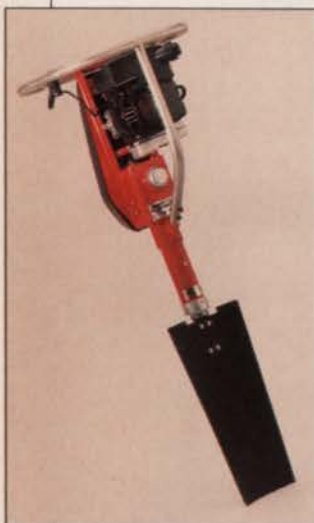
- Zero-radius turning
- Direct hydraulic drive
- Wide wheel base and oversized rear wheels — exceptional hill stability!
- 18- or 16-hp B&S Vanguard V-twin with Magnetron ignition
- Ground speeds to 7.5 mph
- Smooth ride
- 11 gauge steel deck
- Anti-scalp rollers

Circle 227 on reader service card



PESTISORB911™ is new technology designed to provide "lightning-fast" encapsulation of pesticide spray solution spills. PESTISORB911 is a compact "hypersorbent" that easily fits on any pesticide application vehicle, giving you quick, simple control of spray solution spills. Just one pound encapsulates over 40 gallons of spilled spray solution. Encapsulated spray solution particles may then be soil applied (at an EPA approved rate), saving you time and money vs. conventional disposal methods. Available in a variety of kit configurations. Contact us for a Free Spill Control Diagnostic Worksheet.

Circle 229 on reader service card



DYNA DIGGER

This unique machine weighs only 43 pounds, is one man operable and is driven by a two-cycle engine. Its main use is for digging trees and shrubs. It is also used for root pruning and has been making the standard spade obsolete. Throw

your old shovels away. Contact us for a free video.

Circle 226 on reader service card



Turbo Turf Hydro Seeding Systems from **BADGER ASSOCIATES** allow one person to apply seed, mulch and fertilizer in a fast, easy step. The HS-300-E will blend a load of materials nearly instantly. Each load will seed approximately 4,000 square feet and can be sprayed on in about 12 minutes. Nearly any type of seed, fertilizer and hydro mulch may be used. The HS-300-E is a skid-mounted unit that will fit inside the bed of a pickup, or may be trailer mounted. The complete system, ready to operate, is priced at \$3,995. Other models are available from 50- to 1,600-gallon capacity.

Circle 228 on reader service card



Mapping Assistant

REAL GREEN COMPUTERS

has developed the first sophisticated routing, scheduling and mapping system for the green industry. With Mapping Assistant, a new module that can be integrated with Lawn Assistant II for Windows, select your customers and have truck routes created automatically! Print detailed directions to each stop and color maps for the route.

Industry studies have proven Mapping Assistant will increase your company's productivity by at least 10 to 20 percent.

Circle 230 on reader service card

NEW PRODUCTS



The Z Master™ Z222 Hydro zero-radius tractor mower from **Toro** is equipped with a 22-hp Kohler® Command vertical shaft engine to cover 25 acres a day at speeds reaching 8 mph.

Available with a 52-inch Recycler® deck or 52- and 60-inch side discharge decks, the Z Master has hydrostatic drive and 22-inch drive tires.

Circle 201 on reader service card

The router-type cutting head of the MacKissic CPSC stump cutter is powered by a 5.5-hp Honda, a 5.5-hp Vanguard or a 9-hp Vanguard engine. A swing over adjustable handle enables the 180-pound, 25-

The QB Series blowers from **Billy Goat Industries** have a 14-blade fan and rounded housing to reduce noise. Fan blade design is said to help reduce operator fatigue. Available engines include Briggs & Stratton models from 5- to 16-hp and Hondas in 8- and 11-hp sizes. Other features include a shock absorbing handle and a movable discharge chute.

Circle 200 on reader service card



inch wide CPSC to work as both a front and rear cutter.

Circle 202 on reader service card

The **Snow Wolf** skid loader snowplow system is available in seven sizes between 6 feet and 9 feet and hydraulically angles 32.5 degrees left and right in three seconds. Solid link framing allows full down pressure in either direction of travel while the full trip cutting edge protects the machine from damage.

Circle 203 on reader service card

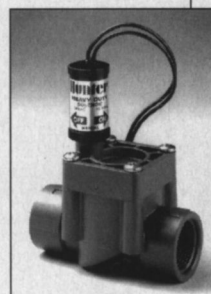
Hadco's NightLife® landscape lighting line includes a composite Bullyte designed

specifically for PAR 30 halogen and metal halide lamps. The BC3's color impregnated composites give the light a long-lasting finish while the field adjustable socket accepts short or long neck lamps.

Circle 204 on reader service card

Hunter Industries' SRV valve for residential installations is a 1-inch plastic globe made of long-lasting PVC.

The valve, which operates within a flow range of 1 to 30 gpm and a pressure range of 20 to 150 psi, also includes a heavy duty solenoid and a diaphragm



You Have Questions...

What's our profit on this job? Is there a faster way to produce estimates? What's next month's work schedule? Do we have any unproductive employees? Where do we stand financially?



CompuScapes Has Answers...

Our software was created for the demanding, growing professional. One who wants a finely tuned organization, delivering peak performance and quality in products and services. If you are ready to step up to this level of managing your business, now is the time to **Step Up To CompuScapes!**



CompuScapes Has Answers...

As we design our software, we look at what *you* want a software package to do. Compare your list with ours:

- | | | |
|-------------------------|--|------------------------------------|
| • Estimates & Proposals | • Accounts Payable | • Inventory Mgmt & Purchase Orders |
| • Job Costing | • TimeKeeping | • Report Writer |
| • Routing & Scheduling | • Job Inventory | • Lead Tracking |
| • Workorders | • General Ledger & Financial Stmtnts | |
| • Invoicing | • Hand Held 'Point of Service' Computers | |
| • Accounts Receivable | | |



CompuScapes Has Answers...

And the sooner we hear from you, the sooner you can see why taking that **Step up to CompuScapes** will be the solution to your business management challenges! Call us at **(800) 350-3534**.

(Starting at \$2,995 Rental & Financing available)

USE READER SERVICE #61

EMERALD® GREEN LAWN CARE

Be in business for yourself, not by yourself...join our growing family of franchise partners. Enjoy the benefits of:

- Strong brand affiliation with exclusive Scotts® products
- Powerful sales/marketing programs
- Exclusive territory rights
- Complete agronomic and horticultural training
- Ongoing technical and business support
- Financing available

For a **FREE OPPORTUNITY KIT** Call...

800/783-0981

e-mail: 74157.77@compuserve.com

...featuring

Scotts®
products

USE READER SERVICE #62

Lawn & Landscape

SERVING THE \$30 BILLION PROFESSIONAL LANDSCAPE CONTRACTING INDUSTRY

READER
SERVICE CARD
9/96

FREE INFORMATION

1	21	41	61	81	101	121	141	161	181	201	221	241
2	22	42	62	82	102	122	142	162	182	202	222	242
3	23	43	63	83	103	123	143	163	183	203	223	243
4	24	44	64	84	104	124	144	164	184	204	224	244
5	25	45	65	85	105	125	145	165	185	205	225	256
6	26	46	66	86	106	126	146	166	186	206	226	246
7	27	47	67	87	107	127	147	167	187	207	227	247
8	28	48	68	88	108	128	148	168	188	208	228	248
9	29	49	69	89	109	129	149	169	189	209	229	249
10	30	50	70	90	110	130	150	170	190	210	230	250
11	31	51	71	91	111	131	151	171	191	211	231	251
12	32	52	72	92	112	132	152	172	192	212	232	252
13	33	53	73	93	113	133	153	173	193	213	233	253
14	34	54	74	94	114	134	154	174	194	214	234	254
15	35	55	75	95	115	135	155	175	195	215	235	255
16	36	56	76	96	116	136	156	176	196	216	236	256
17	37	57	77	97	117	137	157	177	197	217	237	257
18	38	58	78	98	118	138	158	178	198	218	238	258
19	39	59	79	99	119	139	159	179	199	219	239	259
20	40	60	80	100	120	140	160	180	200	220	240	260

Name _____
Title _____
Company _____
Address _____
City _____ State _____ Zip _____
Phone # _____

1. Do you wish to receive (continue to receive)

Lawn & Landscape magazine?

☐ YES ☐ NO

Signature (required) _____ Date _____

2. What is your primary business at this location? (please check one)

CONTRACTOR or SERVICES:

- ☐ Landscape Contractor (maintenance & installation)
☐ Chemical Lawn Care Company (excluding mowing maintenance service)
☐ Lawn Maintenance Contractor
☐ Ornamental Shrub & Tree Service
☐ Irrigation Contractor
☐ Landscape Architect
☐ Other Contract Services (please describe): _____

IN-HOUSE LAWN CARE/MAINTENANCE:

- ☐ In-House Maintenance including:
Educational Facilities, Health Care Facilities,
Government Grounds, Parks & Military
Installations, Condominium Complexes,
Housing Developments, Private Estates,
Commercial & Industrial Parks.

DISTRIBUTOR/MANUFACTURER:

- ☐ Dealer ☐ Formulator
☐ Distributor ☐ Manufacturer

OTHERS ALLIED TO THE FIELD:

- ☐ Extension Agent (Federal, State, County, City, Regulatory Agency)
☐ School, College, University
☐ Trade Association, Library
☐ Others (please describe): _____

3. What were your approximate 1995 revenues?

- ☐ 0 - \$50,000
☐ \$50,001 - \$100,000
☐ \$100,001 - \$250,000
☐ \$250,001 - \$500,000
☐ \$500,001 - \$1 million
☐ + \$1 million

4. How many of your employees are:

- _____ Full time _____ Applicators
_____ Seasonal _____ Maintenance

5. What percentage of your business is:

- _____ % Commercial/Industrial
_____ % Residential
_____ % Gov't/Municipal
_____ % Golf

6. Circle what percent of your business is:

Lawn Care	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Maint. Serv.	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Irrigation Serv.	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Pest Control	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Installation	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Trees & Ornmtls.	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

7. How much did your company spend in 1995 on?

- Turf Chemicals \$ _____
Ornamental Chemicals \$ _____
Equipment \$ _____

8. How many does your business operate?

- _____ Walk Behind Mowers
_____ Riding Mowers
_____ Trimmers
_____ Chain Saws
_____ Blowers

Please
provide all information for
processing.

Lawn & Landscape

☐ Check here for a free sample issue of
T&O Service Tech, the only magazine
for front-line service professionals.

FREE

PRODUCT INFORMATION

For more information on advertised and featured products and services, circle the appropriate number on the card above, complete the required information and mail.



The leading
management magazine
serving the
professional landscape
contracting marketplace.

Lawn & Landscape

- ☐ Payment Enclosed ☐ Bill Me
☐ 1 Year \$30.00 ☐ 2 Years \$42.00
☐ Canada 1 Year \$35.00
☐ Foreign 1 Year \$98.00
☐ Foreign Airmail 1 Year \$218.00

Date _____

Name _____

Phone _____

Company _____

Address _____

City _____ State _____ Zip _____

☐ Check here for a free sample issue of *T&O Service Tech*,
the only magazine for front-line service professionals.

I. WHAT IS YOUR PRIMARY BUSINESS AT THIS LOCATION?

(Please check only one.)

I. CONTRACTOR or SERVICES:

- ☐ 1. Landscape Contractor (maintenance & installation)
☐ 2. Chemical Lawn Care Company (excluding mowing maintenance service)
☐ 3. Lawn Maintenance Contractor
☐ 4. Ornamental Shrub & Tree Service
☐ 5. Irrigation Contractor
☐ 6. Landscape Architect
☐ 7. Other Contract Services (please describe) _____

II. IN-HOUSE LAWN/CARE MAINTENANCE

- ☐ 1. In-House Maintenance including: Educational Facilities, Health Care Facilities, Government Grounds, Parks & Military Installations, Condominium Complexes, Housing Developments, Private Estates, Commercial & Industrial Parks.

III. DISTRIBUTOR/MANUFACTURER:

- ☐ 1. Dealer
☐ 2. Distributor
☐ 3. Formulator
☐ 4. Manufacturer

IV. OTHERS ALLIED TO THE FIELD:

- ☐ 1. Extension Agent (Federal, State, County, City, Regulatory Agency)
☐ 2. School, College, University
☐ 3. Trade Association, Library
☐ 4. Others (please describe) _____

2. What best describes your title?

- ☐ Owner, Pres., Vice Pres., Corp. Officer
☐ Manager, Director, Supt., Foreman
☐ Agronomist, Horticulturist
☐ Entomologist, Plant Pathologist
☐ Serviceman, Technician
☐ Scientist, Researcher
☐ Company, Library copy only
☐ Other (please specify) _____

9/96

Place
Stamp
or
Meter
Here

Lawn & Landscape

SERVING THE \$40 BILLION PROFESSIONAL LANDSCAPE CONTRACTING INDUSTRY

PO BOX 5817
CLEVELAND, OH 44101-0817



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS MAIL PERMIT NO 1322 CLEVELAND OH

POSTAGE WILL BE PAID BY ADDRESSEE

Lawn & Landscape

PO BOX 5817
CLEVELAND OH 44101-9867



support to prevent possible stress failure.

Circle 205 on reader service card

Boossen's BL-2000 belt-driven debris blower is 40 inches in



diameter and has a 9-inch wide blower fan with front and rear intake for a 7,000-cfm volume. The BL-1000 has a 27-inch diameter fan with a tractor 3-point-mount that fits on front mount mowers.

Circle 206 on reader service card

The Hurricane® Plus Series walk-behind wheeled blowers from **Parker Sweeper** create air volume up to 2,200 cfm with

various engines and is made of 12-gauge steel. A hand controlled deflector adjusts to direct air flow through front or

side discharges, while a front grill provides silencing and debris deflection.

Circle 207 on reader service card

LITERATURE

Echo's 56-page color catalog highlights products ranging from trimmers and edgers to snow throwers. Each is shown with specifications.

Circle 208 on reader service card

How to Prune and Care for Your Trees is a 12-page booklet from **Technic Tool** covering subjects ranging from fertilizing to pruning safety tips.

Circle 209 on reader service card

An eight-page brochure from **Excel** highlights the Hustler 4000 Series front mount mowers. It also

covers many available attachments for these mowers.

Circle 210 on reader service card

Westhoffer's brochure features pesticide spraying equipment along with information about each model. Ordering information covers products from Green Garde, Hudson and Flowmaster.

Circle 211 on reader service card

The Lawn, Garden & Power Equipment Spark Plug Application Catalog from **Champion** lists 74 pages of products for mowers, chain saws, lighting, pumps and other landscape equipment.

Circle 212 on reader service card

BILLMASTER®

THE COMPLETE BILLING SOFTWARE!

- Quick professional invoicing.
- Track multiple businesses.
- Easy & reliable.
- General ledger & inventory.
- Chemical tracking for D.E.C.
- Tax & financial reports.
- Contracts & proposals.
- Scheduling, routing, & mailing lists.
- Unlimited TOLL FREE training & support.
- MUCH MORE FOR ONLY \$695.00
(Easy payment plan available)

CALL FOR FREE DEMO DISK!

PLEASE SPECIFY DISK SIZE 3 1/2 OR 5 1/4

1-800-572-8713

CUSTOMIZED BUSINESS SOFTWARE, GLEN ROCK, NJ

USE READER SERVICE #63

TC-100 PRO Insert Dumper



Transform Your Pickup Truck to a Working Dump Truck!

- 2 Ton Capacity • 750 lb. weight
- Pre-assembled and self contained
- Fits any full-size pickup or trailer deck

TRUCKCRAFT

Distributor Inquiries Invited

5751 Molly Pitcher Hwy. S
Chambersburg, PA 17201
717-375-2900 FAX 717-375-2975

**1-800
755-DUMP**

USE READER SERVICE #64

NEW PRODUCTS

Husqvarna's 225L trimmer includes the E-tech™ engine, a redesigned two-stroke engine with a lower temperature catalytic converter that delivers up to 40 percent more power and 30 percent more fuel



efficiency than the 122 series. The 225L also includes the LowVib™ anti-vibration system.
Circle 213 on reader service card

The Zipper-TS™ Model TS2293K74SD mower has a 22-hp Kohler Command

J.D. Safety Work Pants from Shawnmark Industries protect workers from knee injuries with built-in foam knee pads for working on hard surfaces. The abrasive resistant, completely waterproof sheathing on the knees and seat of the pants also keeps workers dry.

Circle 214 on reader service card

engine with a 74-inch wide side discharge deck. A 5.5- and 11-bushel grass collection attachment is available, as well as a mulching kit.

Circle 215 on reader service card

Sustane's Bolster plant growth supplement is available in 3-pound water soluble packages



for treating various warm- and cool-season turfgrasses. Bolster basic is also offered in 1-pound water soluble packets and liquid form for ornamental applications.

Circle 216 on reader service card

The HydrOasis™ from TrimmerTrap provides workers with a constant supply of cool liquid to eliminate time consuming trips back to the truck. A 50-ounce insulated reservoir of liquid attaches to the worker's belt with a tube

leading to a mouthpiece which clips to the worker's clothing for easy access.

Circle 217 on reader service card

JCB added an ergonomically designed cab and canopy to its 210 Series backhoe/loader tool carriers. Heater output is now



25,000 BTUs with an air handling system volume of 450 cfm and improved visibility.

Circle 218 on reader service card

(continued on page 66)



NIGHT-HAWK

Lighting Products, Inc.
LANDSCAPE LIGHTING

Under 15 Volt
UL Listed



Built to Illuminate the Landscape!

12927 S.W. 133 Court, Miami FL 33186

(305) 256-6900 Fax (305) 256-0299

1-800-230-9577

Email mjhhawk@icanect.net

Visit our Web Page

<http://www.icanect.net/nitehawk/index.htm>

USE READER SERVICE #65

SC & S TURF CARE EQUIPMENT, INC. TURF TRACKER

SS8030



FEATURES:

- Spreads and sprays over 4000 sq. ft. per minute.
- Zero turning radius for maximum maneuverability.
- Full hydrostatic drive.
- 12' break away spray boom.
- 150 lb. capacity; 3 speed electric spreader.
- Designed for residential and commercial properties.

(216) 966-4511

(800) 872-7050

FAX (216) 966-0956

USE READER SERVICE #66



Creative Curb

Creates profits

Call for FREE Demo Video

- Install over 1000 ft. per day
- Low maintenance
- Create various shapes, sizes and colors
- Self-propelled, electric or gas powered
- Residential, commercial and golf course uses
- Add to your services and bottom line
 - material costs \$.40 per foot
- Durable curbing is freeze thaw tolerant

1-800-292-3488

Concrete Curb & Landscape Border Equipment

Fax 714-587-9680 • 23362 Madero Rd., Suite E • Mission Viejo, CA 92691

THE SKY'S THE LIMIT TCI EXPO '96

Helping your business reach for the stars.

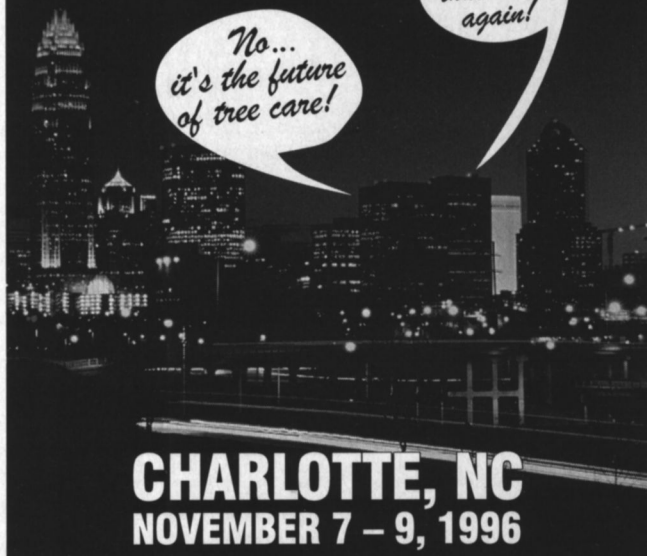
For more information or a registration package, call toll free today:

1-800-733-2622



Look, it's that comet again!

No... it's the future of tree care!



CHARLOTTE, NC

NOVEMBER 7 - 9, 1996

Tested by Lawn Care Professionals and Homeowners

All of the Features, None of the Hassles!

The AERATOR™ from TURFCO® offers so many valuable features it's impossible to list them all here. Like all TURFCO equipment, the AERATOR is specially designed to meet the tough demands of professional lawn care and rental operations.

Separate throttle and clutch controls, along with our unique drum-forward design, provide superb control, so even first-time users can get professional results. Sturdy bumpers on the front and sides allow operation close to fences and other objects without worry — and they're also handy for loading and tiedown.

Design features include a fully enclosed drive chain to eliminate the excessive wear that's so common with most other brands, and box-frame construction that eliminates unnecessary welds while keeping the AERATOR compact enough to fit through a 32" gate.

Aerate up to 26,000 sq ft per hour with 2 3/4" deep penetration, using your choice of Honda or Briggs and Stratton power.



Converts in minutes with our exclusive sod-roller option, giving you the value of two machines at a fraction of the price!



TURFCO

MFG. INC. • 1655 101st Avenue NE • Minneapolis, MN 55449-4420 • Phone: (612) 785-1000 • FAX (612) 785-0556

AERATORS • SOD CUTTERS • EDGERS • DRILLING UNITS • POWER RAKES • PIPE PULLERS

USE READER SERVICE #67

NEW PRODUCTS

(continued from page 64)

Daewoo Equipment's DSL 601 Tiger skid-steer loader has a 1,300-pound capacity with a



4-cylinder, 41-hp industrial diesel engine with a direct injection fuel system. Standard equipment includes flotation tires, operating lights, auxiliary hydraulics and a rear cab window for visibility.

Circle 219 on reader service card

Mycoject, a systemic, low-exposure **J.J. Mauget** tree injection product, places

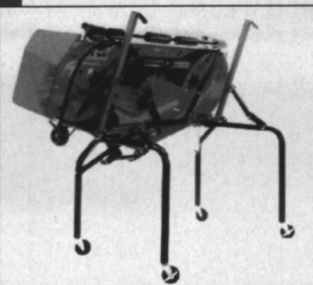
oxytetracycline into the vascular system of the tree to counter pathogen attacks. Mycoject counters bacterial diseases of ornamental trees such as ash and palm yellows.

Circle 220 on reader service card

A 5.5-hp OHV Kawasaki engine powers **Snapper's** CP21550KWV 21-inch mower with self-propelled drive, full pressure lubrication and a spin-on oil filter.

The mower is equipped with a Hi-Vac® deck for enhanced bagging and mulching performance and also converts to side discharge.

Circle 221 on reader service card



McCanse Engineering's Deck Kart makes removal, servicing and reinstallation of mower decks safe and easy. The Kart supports 32- to 74-inch decks

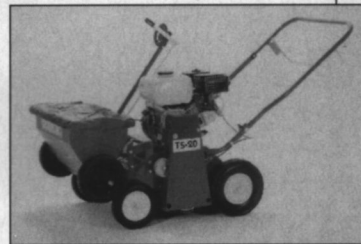
DowElanco's Gallery™ 75 dry flowable preemergence herbicide is said to prevent 95 broadleaf weeds such as dandelion and chickweed for up to eight months without injury to existing broadleaf or grass landscape species. It has received interim registration in California.

Circle 222 on reader service card

weighing up to 400 pounds and tips up and locks at a 70-degree angle for top and bottom access. Four 4-inch wheels move the unit around easily.

Circle 223 on reader service card

Classen's Model TS-20 turf seeder can seed a new lawn, overseed an existing lawn or



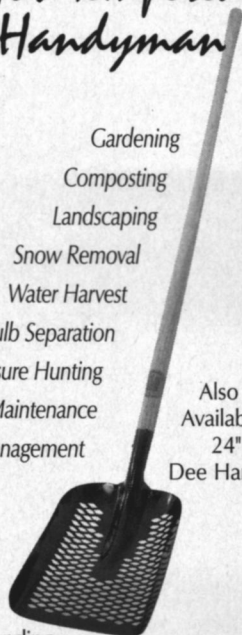
function as a vertical cutter by cutting slits in the turf. An optional flail blade assembly easily converts the unit into a turf rake.

Circle 224 on reader service card

The Cold-Rolled Hot-Tempered Handyman

Gardening
Composting
Landscaping
Snow Removal
Water Harvest
Bulb Separation
Treasure Hunting
Pond Maintenance
Stable Management

Also
Available
24"
Dee Handle



Patent Pending

**SHRAKE™
BRAND TOOLS**

800-997-4373
Fax 801-259-5353



Cards

put **your** name in front of **your** customers at the holidays when **other** companies are already trying to get their business.

Try time-tested tactics for **CUSTOMER DEVELOPMENT.**

Send \$5 for the booklet
**How to Get and Retain
Lawn Care Customers.**

- ❖ Greeting Cards
- ❖ Mailing Service
- ❖ Newsletters
- ❖ Employee training

KEY SOLUTIONS

CALL (800) 748-1710

PO Box 16264,
Rocky River, OH 44116



ICD's StoneWall SELECT® retaining walls provide the natural look of hewn stone in a stackable, mortar-free wall system of unparalleled versatility. With one system you can build circular, serpentine or straight walls. Steps, 90-degree corners and landscape lighting can easily be incorporated into wall designs. When combined with soil-reinforcing geogrids, walls over 30 feet high can be constructed. StoneWall SELECT weighs less than other alternatives, and the profile is user-friendly to the installer. The system provides a built-in batter. StoneWall SELECT is made of durable, high-strength concrete and will last a lifetime.

ICD Corporation
Innovative Concrete Design

800 / 394-4066 • 414 / 962-4065

RATES

All classified advertising is 95¢ per word. For box numbers, add \$1.50 plus six words. All classified ads must be received by the publisher before the first of the month preceding publication and be accompanied by cash or money order covering full payment. Submit ads to: L&L, 4012 Bridge Ave., Cleveland OH 44113. Fax: 216/961-0364.

BUSINESS OPPORTUNITIES

LAWN CARE PROGRAM

NaturaLawn® of America

The leader in natural organic/biological lawn care is now expanding nationwide. Our franchise offers:

- Exclusive Territory
- Proprietary Product Lines
- Comprehensive Support
- Thorough Agronomic Training
- Financing to Qualified Individuals

To learn more, contact Randy Loeb, Franchise Development Manager at:

800/989-5444.

WHOLESALE DISTRIBUTOR

Needed to market environmentally friendly, liquid, slow-release fertilizer products direct from manufacturer. Ken Franke, P.O. Box 123, Plato, MN 55370; 800/832-9635.

BIDDING FOR PROFIT

"BIDDING & CONTRACTS YOUR KEY TO SUCCESS," a book with over 16 years experience, not theory. Get factual information on a very accurate and profitable bidding process. Bid sheets, contracts and much more. Send \$42.95 to: #1 Profits Unlimited, 3930-B Bardstown Road, Louisville, KY 40218. 800/845-0499.

EXTRA INCOME POWER WASHING

EARN \$100/hour power washing and sealing wood decks. Learn the most effective method, equipment setup and supplies. Complete training package: Manual, video, advertising kit and equipment catalog. For free information packet call 810/683-9080.

GROWTH OPPORTUNITIES

BUILD A LARGE LAWN CARE BUSINESS
WE'LL SHOW YOU HOW WITH OUR:

- Ecology Friendly Approach
- Superior Marketing Methods
- State of the Art Computer System

CALL TO LEARN ABOUT OUR GROWTH
AND REMAINING OPPORTUNITIES

CALL NUTRI-LAWN, Ecology Friendly
Lawn Care 800/396-6096

TURF MANAGEMENT

A must for all landscape professionals, *Turfgrass Ecology & Management* by Dr. Karl Danneberger, is the industry's first professional turf management text devoted to advanced environmental ecology. This pioneering work can be yours for only \$28 per copy plus \$2.50 shipping and handling. Quantity discounts available. Call Fran Franzak, 800/456-0707.

GET CHRISTMAS BUSINESS

Outdoor Christmas decorating services will stretch your season and improve your bottom line. Adams Mfg. makes the most versatile, easiest to use, best quality, professional outdoor Christmas decorating fasteners and accessories: UNIVERSAL LIGHT HOLDER — One product holds C9, C7, or mini lights, works on all roofs and gutters and allows adjustable light orientation. LIGHT STAKE — Most economical way to illuminate driveways, walkways and landscaping. ROOF HOOK & GUTTER HOOK — Quick, easy way to hang light strings on homes. Call or write for FREE SAMPLE KIT and bulk pricing. ADAMS MFG., 109 West Park Road, Portersville, PA 16051, Attn: Laura Green: 800/237-8287, FAX: 412/368-9311.

ORGANIC BASED SYSTEMS FOR LAWN, TREE & SHRUB CARE

Green Pro Services (since 1977)

ASSOCIATE PROGRAM

- You're the boss (not a franchise)
 - Protected areas
- Pure organics (not waste products or manures)
 - Training by experts
- Up to \$10,000 investment (back in your pocket within 9 months)

Our present associates have increased their business profits by 25 percent to 300 percent. Find out how. 800/645-6464.

BUSINESS SERVICES

LEASING & FINANCING OPTIONS

Landscape Contractors
Commercial Maintenance Contractors
Golf Course Superintendents

Call for free, no obligation bid on equipment leases and accounts receivable financing. Contingency based services.

KNEPPER ASSOCIATES, INC.
Capital Search & Secure Specialist
614/369-1941
Same Day Quote

BUSINESSES FOR SALE

LAWN CARE CORPORATION

Colorado is BOOMING!!! 12-year Lawn Care company with sales of \$350,000 (March-October). Owner moving. Selling all including 14,000-square-foot fenced lot with a 4,000-square-foot drive through office/warehouse. (Lease negotiable on real estate). Great opportunity, great income, affluent clientele. Owner will consult. \$500,000 with real estate — \$330,000 without. Colorado Springs, CO. 719/338-8110.

GROUNDS MAINTENANCE FIRM

Upper Midwest-based year around grounds maintenance firm specializing in large contracted property maintenance, mowing, pruning, weed and feed, and snow removal. Revenues exceed \$2M. Experienced staff in place. Outstanding reputation, offers turnkey opportunity with established client base. Reply to L&L, Box 384, 4012 Bridge Ave., Cleveland, OH 44113.

LAWN SERVICE SOUTH FLORIDA

Lawn service for sale in South Florida. Commercial and residential accounts. Gross income \$100,000/year. Ford 350 diesel dump body; John Deere 725 54-inch; Scag 36-inch; John Deere 36-inch. Tel. 954/742-9432.

LAWN AND PEST CONTROL COMPANIES FOR SALE

North Georgia	Gross:	\$180,000
Brevard County, Fla.	Gross:	\$360,000
Broward County, Fla.	Gross:	\$ 75,000
Broward County, Fla.	Gross:	\$150,000
Charlotte County, Fla.	Gross:	\$575,000
Clay County, Fla.	Gross:	\$510,000
Florida Panhandle	Gross:	\$300,000
Sarasota County, Fla.	Gross:	\$30,000
St. Lucie County, Fla.	Gross:	\$ 90,000
Volusia County, Fla.	Gross:	\$110,000

Just as you would spruce up your home to obtain top dollar from buyers. The same holds true when selling your business.

If you are considering selling your company, good planning now will provide your business with better profits and enable you to receive a better price when you do sell.

All Calls Are Confidential

Preferred Business Brokers

Jay Hollon, PCO
Licensed Broker
800/633-5153
941/858-4185

COMPUTER SOFTWARE

WINDOWS ACCOUNTING SOFTWARE

WINDOWS

Try Our New CSA Service For
Windows Accounting Software. It Includes:

- Statements • Invoices • Work Orders • Route Sheet
- A/R • Periodic Service & More • Estimation/Contracts

Ask For A Free Demo.

- CSA Service for Windows \$325
- CSA Service G/L for Windows \$ 75

714-738-3414



COMPUTER SYSTEMS
APPROACH INC.
1140 S. Raymond Ave. Unit F
Fullerton, CA 92631

PARTS & SERVICES

EQUIPMENT MAINTENANCE TIPS

How to more than double the life of your vehicles and equipment! Free Money Saving Maintenance Tips. PMP, 10620 Nevada St., Melrose Park, IL 60164. 847/455-3923.

WANTED TO BUY

HYDROSEEDERS & STRAW BLOWERS

We Buy, Trade & Sell New and Used Hydro-Seeders and Straw Blowers. Call 800/245-0551 for a free copy of our latest used equipment list or our catalog of Hydro-Seeding equipment and supplies.

CLASSIFIEDS

FOR SALE

FINANCING

LET THE GOVERNMENT FINANCE your small business. Grants/loans to \$800,000. Free recorded message: 707/448-0270. (NK8)

POWER EQUIPMENT REPLACEMENT PARTS

Premium Replacement Parts for Outdoor Power Equipment

J. THOMAS DISTRIBUTORS, INC.

Introducing: INTERMIX™

No Smoke
NEW Oil

FOR THE UNBEATABLE PRICE OF \$23.50 PER CASE



OPTIMUM TRIM LINE™

PRICES START AS LOW AS \$5.99



Complete Gearbox

STARTING AS LOW AS \$149.99



Spindle Bearings

PRICED AS LOW AS \$4.80 EACH



FOR PRODUCT INFORMATION OR A FREE CATALOG OF OUR COMPLETE LINE OF MOWER AND SNOWBLOW PARTS CALL 1-800-422-4184

INSURANCE

COMMERCIAL INSURANCE FOR LAWN CARE FIRMS "GREEN INDUSTRY SPECIALISTS"

M.F.P. Insurance Agency is dedicated to providing comprehensive insurance programs to the Green Industry at competitive prices. We back up this dedication with a staff of professionals who understand every facet of your business, from marketing to customer service. We know how to properly insure your company whether you're a sole proprietor or a multi-state operation.

Just as your customers look to you for lawn care advice, people come to us for insurance advice because they do not want to become insurance experts themselves. If you want good advice, the right coverage and competitive rates, please contact:

Richard P. Bersnak, President
Jill A. Leonard, V.P.

1-800-886-2398
FAX: 614-221-2203

M.F.P. Insurance Agency, Inc.
50 West Broad Street, Suite 3200
Columbus, OH 43215-5917

Call to advertise today!
800-456-0707

WHOLESALE TURF SUPPLIES

CLIP For Windows Computerized lawn industry program. SPECIAL DISCOUNTED PRICES: 125 customer limit \$695, no customer limit \$1190. **Kawasaki Engines** 12.5-hp with oil filter \$549.95, 14-hp with oil filter \$625.00, **RBG Blade Grinder** \$329.95, **Velke** Why walk when you can ride? \$229.95, **Lawn Spray Hose** 300 ft. of 1/2-inch I.D. 200-psi hose \$180. **ChemLawn Spray Guns** \$69.79, **Nozzles** \$11.15.

Hersch's Wholesale Turf Supplies
Call Today for your FREE 1996 Summer Catalog!
810/543-2200 (Michigan)
800/THE-LAWN (Outside Michigan)

PREMIUM REPLACEMENT PARTS

MKI The Landscapers Superstore™ — Call today for your FREE WHOLESALE CATALOG. Landscaping supplies, engines, parts and accessories at Wholesale. Look — 12.5 Kawasaki replacement filters as low as \$3.99. Many other great savings. Call MOHAWK INDUSTRIES at 800/724-2229 for your FREE CATALOG.

CUSTOM DECAL KITS

CUSTOM DECAL KITS



*Easy to Order - Easy to Apply
Boost Your Image Economically*

Call or Write:
Sun Art Decals Inc.
885 W. Bagley Rd.
Berea, OH 44017
216-816-0290
800-835-5551
Fax: 216-816-0294



PISTON PUMPS

GNC
PUMP Inc.
GNC Piston Pumps
8 GPM @ 600 PSI (\$395.00)
15 GPM @ 600 PSI (\$695.00)
30 GPM @ 500 PSI (\$1,295.00)
All pumps complete w/regulator, surge tank, pressure dump valve., pres. gauge and pulley. 1 YEAR WARRANTY.
800/462-2005

E-Z TRENCH

E-Z Trench Model J3000. Used 2 times. Good as new. Price — \$2,300. 7:00 a.m. to 5:00 p.m. — 615/895-5522; anytime — 615/890-4272.

GMC CABOVER

1990 GMC Cabover with Warner stainless tanks and beds. Hydrocell 25-gpm with two hose reels. 1,000-lb. dry storage. 201/891-6456.

LANDSCAPE SUPPLIES

Landscapers' Supply Corp ... The first ... and still the best, for all your equipment, parts, accessories and snow-plowing needs, at the LOWEST PRICES in the industry — GUARANTEED! Call us at 800/222-4303 for your FREE 180-PAGE CATALOG!

FIBERGLASS SPRAYER

GNC
PUMP Inc.
100 Gal. Fiberglass Sprayer
\$1,995.00
Briggs 5-hp IC Plus Eng.
(with oil guard)
Hannay Hose Reel
150 ft. 1/2-inch 560-psi Hose
Mag 1 Spray Gun
8 gpm @ 600-psi Piston Pump
800/462-2005

TOPSOIL SHREDDERS

Topsoil Shredders THE SCREEN MACHINE®

800-837-3344



7001 Americana Parkway
Reynoldsburg, OH 43068

SIDEWALK DEICER

Low Cost
Melting at
Lower
Temperatures



ROAD CREW™
SERIOUS
ICE MELTING
CRYSTALS

**NEW
IMPROVED**

**FOR FAST ACTION
AT LOWER
TEMPERATURES ON
SIDEWALKS, DRIVEWAYS
AND PARKING LOTS**

CALL 1-800-822-6671
FAX 1-608-654-5696

CFS SPECIALTIES, INC.

LAWN SPRAY TRUCK

1988 Ford F600, 370-hp engine. 1200-gallon Tuflex main tank, 200-gallon drop tank with mechanical agitation. Hannay electric hose reel, 300 feet 800-psi hose, 18-hp twin cylinder Briggs engine with 20-gpm Bean pump. 162,000 miles, good condition. Currently working every day. \$9,850.00. Fort Myers Pest Control, Inc. 800/329-3100.

LESCO SPRAYER

Lesco 200-gallon sprayer. Good condition. Call evenings 513/473-2243.

INCORPORATE — FREE BOOKLET

Incorporate without legal fees! Free booklet tells how. Call now! 800/345-2677.

CATCHER LIFT SYSTEMS



ALL SEASONS CATCHER LIFT SYSTEMS

Introducing a new product for Walker Mower Owners to reach greater heights of...

Productivity, Profit, and Safety.

- Lift, dump and go in 20 seconds.
- Improves worker safety.
- Better employee performance.
- Higher profits through more accounts serviced.

Fast Fall Cleanup

800-786-2301

5100 Valley East Blvd., Arcata, CA

HELP WANTED

EMPLOYEE SEARCHES

Florapersonnel, Inc. In our second decade of performing confidential key employee searches for the landscape industry and allied trades worldwide. Retained basis only. Candidate contact welcome, confidential and always free. Florapersonnel, Inc., 1740 Lake Markham Road, Sanford, FL 32771. Phone 407/320-8177, Fax 407/320-8083.

INDEPENDENT SALES REPS

Independent sales reps calling directly on turf professionals. Dynamic new products that will sell. Unlimited earning potential. Protected territory. 100 percent gross margin. No stocking requirement. Will train and support. Send resume to P.O. Box 7346, Louisville, KY 40207 or call 800/334-4962.

LAWN CARE SPECIALISTS

OPPORTUNITY IS KNOCKING. SavATree is expanding our Lawn Care Division! We are seeking ambitious, detail oriented candidates with strong interpersonal skills and sales experience to become part of our progressive and dynamic team. We offer an outstanding compensation package plus a wide range of benefits. Qualified candidates should send or fax their resume to SavATree, 360 Adams St., Bedford Hills, NY 10507 or fax 914/666-5843, Attn: Human Resources.

MAINTENANCE SUPERVISORS

The Brickman Group, Ltd., one of the nation's largest and fastest growing full service landscape companies, has an immediate need in principal cities east of the Mississippi for maintenance supervisors with 2-5 years experience. Brickman seeks energetic, team oriented college graduates with proven leadership, communication and interpersonal skills. Brickman offers full-time positions, excellent advancement opportunities and exceptional compensation and benefits with an industry leader building on a 56-year tradition of uncompromising customer service. For immediate confidential consideration, please send or fax your resume with an indication of your geographic preferences and willingness to relocate to: The Brickman Group, Ltd., Corporate Office, 375 S. Flowers Mill Road, Langhorne, PA 19047, 215/757-9630, EOE.

CAREER OPPORTUNITIES

Do you have entrepreneurial desires and abilities and are unable to exercise them in your present position? Career opportunities in irrigation, landscape management and golf course construction are currently available for college graduates and experienced professionals with 2-5 years experience seeking a solid future with a progressive, award winning landscape company that exceeds customer expectations on a consistent basis. The right person is a team player, organized, self-motivated and prepared to work in a structured entrepreneurial environment and share in the rewards. Career tracks currently available, include:

Team Group Leaders
Team Leaders
Technicians
Sales/Marketing

Eastern Land Management, Inc. is a full-service Northeast landscape contractor. An attractive compensation package, with benefits, will be provided to the successful candidate. Please fax resume to 203/316-5434. All applicants will be responded to.

QUALITY PROFESSIONALS NEEDED

Ira Wickes/arborists, a leader in the green industry for over 68 years, seeks quality oriented individuals to help us continue our growth. Dedicated, career minded candidates are needed for all facets of our organization, including Sales, General Tree Care, Plant Health Care, Integrated Plant Management and Turf Care. We consider professionalism, quality, safety and teamwork to be essential to our operations, so if you would like to work in this environment, bring your experience and ideas to Ira Wickes/arborists at 11 McNamara Road, Spring Valley, NY 10977. Phone 914/354-3400 or Fax 914/354-3475.

MANAGEMENT TRAINEES WANTED

Kapp's Green Lawn, an established, fast growing company, is seeking management and sales trainees for our Midwest locations (Indiana, Missouri, Ohio & Pennsylvania). Lawn care experience or college credits helpful. Must be able to relocate. Excellent benefits. Starting salary upper \$20's. Come work for a company that cares about its employees! Send resume to Michael Markovich, Kapp's Green Lawn, Inc., P.O. Box 9038, Ft. Wayne, IN 46899 or fax resume to 219/432-7892.

EXPERIENCED PRODUCTION MANAGER

OREGON'S LARGEST COMMERCIAL LANDSCAPE COMPANY located in the Portland metro area is looking for an EXPERIENCED PRODUCTION MANAGER for our \$5M-\$6M/year Construction division. Experience in commercial construction excavation, irrigation, landscaping, wetlands, etc. Oversee approximately 60 employees. Position requires excellent communication, organization and managerial skills. Need creative aggressive decision maker, strong leader and problem solver. If you are looking for growth opportunities, join our ALCA award winning team. Competitive salary/benefits. Send resume to NORTHWEST LANDSCAPE INDUSTRIES, 16075 SW Upper Boones Ferry Road, Tigard, OR 97224, OR FAX TO 503/620-7592.

BRANCH SALES MANAGER

National lawn equipment, parts & accessories supplier expanding into the Northeast, Mid-Atlantic and Southeast. Need articulate individual with retail management experience. Computer literate. Several markets available. Send resume with salary history and requirements to: Landscapers Supply, P.O. Box 459, Spring Valley, NY 10977-0459.

LAWN CARE

BEAUTIFUL CHARLESTON, SC — Local Lawn Care Company is seeking a special individual who "can do it all." Sales, service, solid agronomic background, customer driven. This is a GREAT opportunity for the right person. Send resume with salary requirements to: Lawn Care, P.O. Box 41327, Charleston, SC 29423.

PROJECT MANAGER/SUPERVISORS/LEADMEN

CoCal Landscape Services, Inc., a Denver-based company, has immediate openings in our maintenance and construction divisions. We are in need of experienced Irrigation and/or Landscape Supervisors, Leadmen and Project Managers. The landscape installation company needs team players to join a young, growing industry leader with the ability to coordinate materials, equipment, run crews; good communication skills and organizational skills a must. Bilingual a plus. Construction projects range from \$100,000 to \$2 million. Competitive benefits/compensation package for the right individual.

The landscape maintenance division is in need of a Project Manager for two large-scale, multifamily resorts that include parks, water features, private lakes, multiple clubhouses and pools, etc. Responsibilities to include turf and plant management, scheduling of all labor and chemical applications, customer service, job costing, etc. Bilingual a plus, must be organized, assertive, good communication skills and the ability to interface with customer. This is a senior level position with an excellent benefits/compensation package for the right individual.

Great area for family with good amenities such as professional sports, i.e. Stanley Cup Champs, Rockies, Broncos, World Cup Skiing within close proximity, and many more outdoor activities. Please send resume to 3850 East 48th Ave., Denver, CO 80216 or fax to 303/399-7577.

It pays to advertise in L&L classifieds. Call 800-456-0707 today!

seed harvest report

(continued from page 29)

acres are all planted up," he noted.

Perennial ryegrasses will also be tight, and Stanley reported that there have been mixed reviews on the overall harvest.

In addition, he was concerned about an extended rainstorm that was delaying completion of the ryegrass harvest, which he estimated was about 50 percent complete. The delay will make it difficult to get the seed cleaned and shipped to customers when it is needed, he said.

Among the company's new releases will be Discovery, a hard fescue that performed well in National Turf Evaluation Program trials, Citation III and Catalina perennial ryegrasses and Tarheel tall fescue, which was developed and screened for brown patch resistance.

ZAJAC PERFORMANCE SEEDS, N. Haledon, N.J.

All varieties are looking at above average to average yields, according to president John Zajac. The terrible K-31 harvest, high de-

mand and low acreage should escalate prices on turf-type tall fescue in particular. Perennial ryegrass pricing should be firm due to low inventories and some herbicide and flood related damage that occurred in the fall and winter.

Zajac will be offering Snowbird, a new poa trivialis variety for overseeding bermudagrass in the Southeast from Florida through the Southwest to Texas that is low growing, dark green and compatible with perennial ryegrasses.

Two new Kentucky bluegrasses will also be available this fall. Dellwood is said to be strong against summer heat and drought stress and billbug damage, and Dragon features dark green color with improved density and wear resistance and early green-up. Omega III perennial ryegrass is in its first commercial production this fall. **LL**

The author is Managing Editor of Lawn & Landscape magazine.

AD INDEX

ADVERTISER	PG#	RS #
American Cyanamid ...	19,*39	33,19
American Isuzu ...	20	21
Ameriquip ...	36	32
Badger ...	59	228
Bandit ...	21	20
Bayer ...	26,27	18
Brisco ...	59	226
E.F. Burlingham ...	28	25
C&S Turfcare ...	64	66
Central Parts Warehouse ...	9	15
Ciba ...	*44,*45	37
Compliance Safety ...	59	229
Compost Council ...	45	39
Compuscapes ...	60	61
Creative Curb ...	65	
Customized Business Software ...	63	63
Daniels Pull Plow ...	31	27
Design Imaging Group ...	22	22
Dingo Digger ...	49	43
Douglas Dynamics ...	10	16
DowElanco ...	7	
Easy Lawn ...	32	29
Emerald Green ...	60	62
Encore Mfg. ...	59	227
E-Z Beaver ...	23	24
Fabricscape ...	32	28
Giant Vac ...	5	74
GIE Expo ...	37	73
Glenmac ...	18	19
GMC Truck ...	14,15	17
Goossen ...	56	55
Grasshopper ...	72	77
Grotech ...	59	225
Harmony Products ...	51	47
Highway Equipment ...	57	56
Hiniker ...	40	34
Hunter Industries ...	2	10
ICD ...	66	76
Jones Mfg. ...	22	23
Kenco/Barrel Caddy ...	50	46
Key Solutions ...	66	71
Landscape 2000 ...	57	57
Lange-Stegmann ...	*33	42
Lester Building Systems ...	53	50
Longhorn ...	50	45
Metromail ...	34	30
National Association for Arborists ...	65	69
Night-Hawk ...	64	65
Nitro-Green ...	8	11
Oldham Chemicals ...	57	59
Olson Irrigation ...	9	13
Quality Lawn Care ...	*65	68
Ransomes Corp. ...	35	31
Real Green ...	59	230
Regal Chemical ...	29	26
The Scooper Co. ...	70	75
Shindaiwa ...	55	53
Shrake Brand Tools ...	66	72
Softdesk ...	42,43	35,36
Spectrum Products ...	53	49
Steiner ...	54	52
Sundance ...	8	12
Sure-Loc ...	56	54
Technic Tool ...	58	60
Terracare Products ...	53	51
Thornton Computers ...	50	44
TruckCraft ...	63	64
Tuflex ...	48	41
Turfco ...	65	67
Turfseed ...	47	40
Univ. of California ...	53	48
Univ. of Georgia ...	70	70
Walker Mfg. ...	71	58
Winners Circle ...	41	

* Denotes regional advertising

Become the Best in the Field: A CERTIFIED TURFGRASS PROFESSIONAL

"Principles of Turfgrass Management" is a home study course certified by The University of Georgia and the Professional Lawn Care Association of America. The course covers all regions and seasons of the U.S.

- Expand your professional knowledge — at your own pace.
- Increase customer confidence.
- Train at home to master up-to-date

turfgrass management principles conveniently and cost-effectively.

Call 1-800-325-2090 for a brochure or write: Turfgrass, Georgia Center for Continuing Education, Room 164, The University of Georgia, Athens, GA 30692-3603.

Used internationally and approved for pesticide applicator recertification in many states.

USE READER SERVICE #70

THE WONDER SCOOPER™

The Fastest Way to Clean Up Leaves and Litter

It bags, it scoops,
it shovels, it bundles
Fill a bag in 10 seconds

PRE-SEASON SPECIAL

\$24⁹⁵

As Seen
on TV

Call 1-800-SCOOPER

Wonder Rake
Available Separately

Web Site: <http://www.reguide.com/scooper/>



USE READER SERVICE #75

WITH "WALKER MOWERS"
ANDERSON LAWN CARE
WORKS IN THE RAIN



**WHEN INDIANA-BASED ANDERSON LAWN CARE
SET OUT TO TAKE A LARGER SHARE OF THE COMMERCIAL
MARKET, LITTLE DID THEY KNOW THAT THE EXTREMELY WET
SPRING WOULD ACTUALLY BENEFIT THEM.**

Bobbie Anderson, owner of Anderson Lawn Care, told us:

"The week before Memorial Day we were asked if we were interested in taking on 15 bank locations in Elkart, Indiana. There was a catch; the previous mowing contractor had been fired, the grass was overgrown (almost 2 feet high in places), we had to complete the first mowing in one week, and rain was expected for the rest of the week. Without hesitation, we accepted the challenge and mowed the first bank the next day in pouring rain. The Walker ran through standing water, and in some places, grass that exceeded the height of the wheels. We mowed in conditions that our competitors literally stopped by the road to watch us work in... We have signed a 3-year contract with the bank and because of our performance secured additional select accounts in the community. Mowing with the Walker is just another way our service is set apart from the rest."

"There isn't another machine on the market that runs like a Walker."

- Bobbie Anderson



WALKER MFG CO. • DEPT. LL • 5925 E. HARMONY RD. • FORT COLLINS, COLORADO 80525 • (800) 279-8537

USE READER SERVICE #58

In ONE year, this **GRASSHOPPER**
will **CUT** and **TRIM** grass, mulch,
side-**DISCHARGE** and **BAG** clippings,
bull-**DOZE** dirt, **THROW** snow,
VACUUM leaves, **SWEEP** walkways,
and **AERATE** soil.

(For every thing there is a SEASON.)

And for every season, Grasshopper has just the right attachments.

- **Year-round versatility.** A full line of attachments lets your Grasshopper zero-radius maneuverability work for you all year long. The exclusive Combo Mulching™ Deck*, with full-flotation option, lets you mulch, discharge or bag with the same deck for superior results in varying conditions.

Other attachments include Quik-D-Tatch Vac® grass collection systems, angle dozer blades, snowthrowers, rotary brooms, dethatchers and AERA-vator™. Quik-D-Tatch® mounting system* permits removing and adding attachments in minutes without tools.

- **Easy to operate.** Even beginning operators get the feel of Grasshopper's dual-lever steering in no time. So natural, operators can mow long hours without tiring.

- **Built-in quality.** Grasshoppers are built to last, with robotic-welded steel construction and highest quality components.

*patent pending



Call or write for the name of your nearest dealer and a "hands on" demonstration.

MOVE UP TO
GRASSHOPPERABILITY
grass'hop'per abil'i'ty n.
 the ability to make all the right moves for mowing quality and timesaving productivity.



Heavy-duty multipurpose 48- and 60-inch dozer blades move dirt, sand, gravel and snow quickly and easily. The V-snow plow clears sidewalks.



PTO-driven 48- and 60-inch fixed angle rotary brooms handle dirt, debris and clean up to eight inches of snow. 60-inch bidirectional broom available.



PTO-driven 48- and 60-inch snowthrowers throw snow up to 20 feet away. Winter enclosure for all snow removal attachments provides protection from wind and snow.



40- or 60-inch AERA-vator™ penetrates hard, dry soil without irrigation. ROPS with overhead canopy is optional.



Durable 48- and 60-inch Time Rake™ dethatchers remove thatch and surface aerate soil. Vinyl sunshade canopy protects operator from sun and heat.

First to Finish...Built to Last

GRASSHOPPER
YOUR NEXT MOWER

The Grasshopper Company
One Grasshopper Trail • P.O. Box 637
Moundridge, KS 67107 U.S.A.

Phone: (316) 345-8621 • FAX: (316) 345-2301

USE READER SERVICE #77